COLUMBIA LIBRARIES OFFSITE
HEALTH SCIENCES RESTRICTED
HR00237701

[illegible]
annual report

SERIAL

Columbia University
in the City of New York

College of Physicians and Surgeons

Library

NOV 12 1943 DLG

Digitized by the Internet Archive
in 2010 with funding from
Columbia University Libraries

http://www.archive.org/details/annualreportofst1893rhod

SIXTEENTH ANNUAL REPORT

UNI
OF THE

STATE BOARD OF HEALTH,

OF THE

STATE OF RHODE ISLAND,

FOR THE YEAR ENDING DECEMBER 31, 1893,

AND INCLUDING THE REPORT UPON THE REGISTRATION OF

BIRTHS, MARRIAGES AND DEATHS IN 1892.

PROVIDENCE, R. I.
E. L. FREEMAN & SON, STATE PRINTERS.
1894.

MEMBERS

OF THE

RHODE ISLAND STATE BOARD OF HEALTH.

	Post Office Address.	
ALBERT G. SPRAGUE, M. D., *President*	RIVER POINT	KENT COUNTY.
SAMUEL M. GRAY, C. E	PROVIDENCE	PROVIDENCE CO.
PAUL S. REDFIELD, M. D	PROVIDENCE	PROVIDENCE CO.
REV. GEORGE L. LOCKE	BRISTOL	BRISTOL COUNTY.
ALEXANDER B. BRIGGS, M. D	ASHAWAY	WASHINGTON CO.
PETER F. CURLEY, M. D	NEWPORT	NEWPORT COUNTY.
GARDNER T. SWARTS, M. D	PROVIDENCE	PROVIDENCE CO.

GARDNER T. SWARTS, *Secretary.*

GENERAL CONTENTS.

General Report.

Report of the Secretary.

- Reports of Medical Correspondents.—Prevalence of Acute Diseases in the Towns.
- Reports of Town Clerks in Relation to Sanitary Improvements in the Towns.
- Reports of Health Officers.
- Meteorology.
- Vital Statistics.
- Miscellaneous Papers and Reports.
  - Filtration of Public Water Supplies.
  - Disposal of Garbage in the City of Providence, R. I.
  - Report of Secretary as Delegate.
  - Examination of Ice Supplies.
  - Examinations of Wall Papers for Arsenic.

Index.

260613

To the Honorable the General Assembly:

In compliance with the Public Statutes, the Annual Report of the State Board of Health is herewith most respectfully submitted.

GARDNER T. SWARTS,
Secretary.

GENERAL REPORT.

The full amount of the work done by the Board for the year cannot be presented as fully in detail as might have been had not the unfortunate death of the Secretary occurred near the close of the year.

Dr. Charles H. Fisher, Secretary of the Board for fifteen years died on October 21, 1893. It had been his intention to treat of many interesting subjects in this report which his successor will not be able to present, owing to the lack of connection with investigations which had been made by the Secretary in person.

The report is, therefore, dependent upon the records of the actions taken by the Board at the various meetings held during the year.

From the records of the various meetings of the Board it will be observed that the work of the Board has been, the investigation of all suspected causes of ill health, the examination of nuisances actual or supposed, the dissemination of literature upon health matters and the continued issuance of the Medical Bulletin.

Especial investigations have been made in reference to the presence of arsenic in suspected wall papers sold by dealers; and in the examinations of ice used for house supplies.

PERSONNEL OF THE BOARD.

The term of the membership of Dr. Paul S. Redfield, of Providence, member from Providence County, expired by limitation, July 1st, 1893.

Gov. D. Russell Brown, at the January Session of the General Assembly, with the advice and consent of the Senate, re-appointed Dr. Redfield for a term of six years from July 1, 1893.

MEETINGS OF THE BOARD.

At the quarterly meeting, held in January, after the usual routine proceedings, the Secretary gave an account of the work during the quarter ending December 31, 1892. Nuisances in different towns attended to and abated, in whole or in part, were reported. The correspondence for the quarter comprised one hundred and eighty-two communications written by the Secretary, letters of inquiry or advice, or in response to communications from officials, national, state, municipal, and various sanitary associations.

The needed blanks for the annual returns to the Secretary of the births, marriages and deaths during 1892, estimated at 21,000, had been furnished to the proper officials. The 39th Registration Report, comprising 270 pages and 97 tables, diagrams, etc., had been completed and printed, and the publication of the Monthly Bulletin continued.

The questions relating to the revision of the health laws of the State and a preliminary report to the General Assembly were considered at some length. The proposed documents in relation to an exhibition at the World's Columbian Exposition, of the work of the Board, by means of maps, charts, diagrams, etc., were named and action taken in assent thereon.

The questions relating to national control of quarantine, with or without state regulations and aid, occasioned considerable discussion, and the opinions expressed were unanimously in favor of national quarantine as securing greater certainty, uniformity and concert of action; that state regulations, not conflicting with the national, would be needed for special requirements in certain locations, and that inter-state as well as seaboard quarantine should be established.

The Secretary presented the results of the analyses of fifty-nine samples of candies by Professor J. H. Appleton. The collection was made from the stock of retailers in different localities in Providence, and principally from the very cheapest in price. The analyses showed that no poisonous substances were found in any of the samples, in colors or otherwise; that glucose was very largely used instead of cane sugar, and starch to the very fullest permissible extent; that clays or other earthy matter were practically not used.

This action was taken by vote of the Board in consequence of numerous expressions on the part of the public of fears of danger from the extensive use of candies so cheaply made.

The Secretary also presented the analyses of twenty samples of wall paper which might, from the colors, be suspected of containing arsenic. Samples of colored papers used for wrapping had been brought at different times to the office, for examination, by different parties who suspected that they had received injury therefrom, and a considerable number of people had intimated a fear that the wall-paper in their houses might be responsible for some of the ill-health of the inmates.

Wrapping papers had, in some cases, been tested by the Secretary with negative results, and Professor J. H. Appleton was requested to select and analyze the twenty samples mentioned above. He reported that he did not detect any arsenic in any of them. The subject of the use of arsenic in the various articles of manufacture will be presented in fuller extent in the fifteenth annual report of the Board.

The Secretary presented his report of attendance at the recent meeting of the American Public Health Association in the City of Mexico.

At the sixteenth annual meeting in July, the Committee on Sanitary Legislation reported that one of the bills approved at a previous meeting had been passed by the General Assembly and had become a public law. The Act read as follows:

CHAPTER 1211.

AN ACT TO PREVENT THE INTRODUCTION OF INFECTIOUS DISEASES INTO THE STATE.

It is enacted by the General Assembly as follows:

SECTION 1. The power to establish quarantine in this State shall be vested in the Governor, who shall authorize and empower the State Board of Health to take such action and make and enforce such rules and regulations as may be deemed necessary to prevent the introduction and to restrict the spread of infectious diseases in the State.

SEC. 2. Whenever quarantine is declared, all railroad and steamboat corporations, stage lines, the owners, assignees, officials and employees of the same and of all vehicles and modes of conveyance of passengers, baggage and freight, shall observe and comply with the rules and regulations made by the said State Board of Health, and any person knowingly violating any of the said rules and regulations of the said Board, shall, upon conviction thereof, be fined not more than fifty dollars, or be imprisoned not more than two years.

SEC. 3. The sum of five thousand dollars is hereby appropriated as an epidemic fund to be used, when deemed needful, by the State Board of Health, with the consent of the Governor, for the purpose of preventing and restricting the prevalence of epidemic diseases, and all expenses incurred in carrying out the provisions of this Chapter shall be paid out of said fund when itemized bills therefor shall have been approved by the Governor

SEC. 4. All acts and parts of acts inconsistent herewith are hereby repealed, and this act shall be in effect from and after its passage.

The bill giving the Board supervision of all the streams and reservoirs in the State, the waters of which are used as public supplies for domestic purposes, with the intent of preventing, as far as possible, the willful and needless pollution of the same, was not approved by a majority of the Committee on Judiciary to whom it was referred.

The bill requiring notification of contagious or infectious diseases, and the sanitary attention to be given to the same by the proper health authorities, with a penalty for the neglect of legal duty, was referred to the Joint Committee on Public Health, but that committee was not called together to consider the bill, and it went over.

The question of the protection of the State from a possible invasion of the Asiatic cholera, by sea, was considered. The Secretary said he had corresponded and had personal interviews with the supervising Surgeon General of the Marine Hospital Service in relation to that matter. The Surgeon General is the executive officer of the Treasury Department in all proceedings relating to quarantine. The understanding now is, that any infected vessel destined for any port between Boston and New York, shall cast anchor at a proper distance from the harbor or landing of such ports, and the health officer or port physician of such ports as have no proper disinfecting establishment, shall notify the Surgeon General of the Marine Hospital Service, who will then order the vessel to Boston or New York, for proper disinfection. Providence and Newport have such port medical officers in commission. As to the invasion of the cholera or other infectious diseases of a dangerous character over State lines, the late Act of the General Assembly will properly apply.

The Secretary gave an account of the unusually malignant character of outbreaks of scarlet fever, in Johnston, Cranston and Warwick, and the restriction of the same.

An account of the numerous conferences, relating to school buildings, infectious diseases, water supplies and quality of the same, sewerage of villages and hotels, etc., was given.

The notices of the arrival of vessels having small-pox or typhus fever on board, with names of passengers and town of destination in Rhode Island, which had been sent the Secretary during the previous quarter, from the office of the U. S. Commissioners of Immigration in New York, were shown. In such cases the Secretary notified the health officer of the town of destination, immediately, giving names, etc.

An account of nuisances in several towns attended to, the inspection of the water-shed of the Jamestown water works, and a proposed cemetery in Cumberland, was given.

An account was given of the exhibits sent to the World's Columbian Exposition, 19 in number, consisting of charts, diagrams and maps, and also sets of reports and blank forms illustrative of the work of the Board in the health department and in the department of vital statistics.

Progress was reported in the printing of the 15th Annual Report of the Board, and in the preparation of the 40th Registration Report, about 60 pages of tables completed. The Secretary had written during the previous quarter, 305 communications, not including written notices and circulars, and several thousands of printed circulars and blanks had been distributed.

The following officers were elected for the ensuing year: For President, Albert G. Sprague, M. D.; For Secretary, Chas. H. Fisher, M. D. Candidates for appointment to the Pan American Medical Congress, were nominated.

A special meeting was held on October 24th, to take action on the death of the late Secretary of the Board, Dr. Charles H. Fisher. There were present Dr. Albert G. Sprague, Dr. Paul S. Redfield, Samuel M. Gray, C. E., Rev. George L. Locke and Dr. A. B. Briggs; the President of the Board, Dr. Sprague, in the chair. Dr. A. B. Briggs was elected secretary of the meeting.

It was voted that the members of the Board attend the funeral of the late Dr. Fisher in a body, on Wednesday, October 25, at twelve o'clock M.

Dr. Albert G. Sprague, Rev. George L. Locke and Dr. Paul S. Redfield were voted a committee to draft suitable resolutions in behalf of the Board, on the death of Dr. Fisher, and that a copy of the resolutions be presented to the family of Dr. Fisher, a copy be presented to the Board at the next meeting and a copy be furnished the press for publication.

Remarks were made by the several members of the Board, all expressing their sincere regrets at the loss of the secretary, who had so long and faithfully served the Board. All spoke with feeling of their great respect and friendship for him, of the great work he had taken up from its inception and had carried forward to the present time with such marked success; that the statistics of the Board of Health of Rhode Island were quoted as always reliable, and almost an authority, by every state in the union. He had always been found progressive, an able and reliable adviser to the Board, and in his death the Board not only had suffered an irreparable loss, but the State as well, had lost a valuable officer; one who had always served them honestly and in good faith, and that in his successor, whoever he may be, it must not be expected to find one who could prove his equal.

On November 9th a special meeting was held.

Dr. Briggs was elected secretary of the meeting.

Rev. Mr. Locke, for the committee appointed to draft resolutions in reference to the decease of Dr. C. H. Fisher, presented the following:

"At a special meeting of the Rhode Island State Board of Health, on the 24th inst., formal announcement having been made by the President of the death of its Secretary, Charles H. Fisher, M. D., it was on motion unanimously

Resolved, that the following minute be entered on the records:

MINUTE.

Dr. Fisher was a public-spirited citizen, a faithful servant of the State Formerly devoted for many years to its service as a member of the Board of Education, he had, subsequently, for sixteen years labored diligently and with high intelligence as the principal representative of the department, which, more than any other man, he had been active in creating, that of Public Health. This, which is now recognized by most of the States of the Union as an essential part of their system of administration, at the time when Dr. Fisher labored for its establishment in Rhode Island had secured such recognition in less than half a dozen States. He had intelligence, clear vision of public needs, was ready to devise and patient to pursue. His activity was not that of mere routine, yet was he notably faithful in detail. As a student and expositor of Vital Statistics his eminence was acknowledged beyond his own State, and even in foreign lands. He did much systematic work in popularizing hygienic and sanitary knowledge throughout the State. Long experience as a general practitioner combined with native good sense and professional learning to make him a valuable laborer in the field of Preventive Medicine, both theoretical and practical. Few probably ever appreciated the large amount of self-sacrificing and arduous work done by Dr. Fisher in one highly important department—recently transferred to another of the State Boards—that of the prevention of contagious diseases among animals.

While thus commemorating the value of his official work the members of this Board gladly make mention also of personal characteristics of their late associate whose departure they profoundly lament. In the case of one so marked by simplicity and unobtrusiveness of life as was Dr. Fisher, there is needed such opportunity as was enjoyed by those closely associated with him, in order to appreciate the thorough kindliness, the modest sincerity, the generosity of his nature.

The following communication was received:

At a meeting of "The Newport Sanitary Protection Association," held October 30, 1893, it was

Resolved, That by the recent death of Dr. Charles H. Fisher, for many years

Secretary of the State Board of Health, the Newport Sanitary Protection Association has been deprived of a friend who, from its organization in 1878, has been constant in his interest in its proceedings, and ever ready to aid in caring for the welfare of this city.

Resolved, That a copy of the above resolution be forwarded to the chairman of the State Board of Health, and with the sympathy of the Association, be, to the family of the deceased. Also that it be printed in the "Newport Daily News."

Attest: H. G. MACKAYE, M. D.,
Secretary N. S. P. Association.

Gardner T. Swarts, M. D., of Providence, was unanimously elected by the Board, as secretary of the Board, for the balance of the fiscal year.

HEALTH IN THE STATE, 1893.

From the reports prepared for the *Monthly Bulletin* of the Board from month to month, the condition of the public health during those months may be more definitely ascertained.

The following extracts are taken therefrom.

January.

Reports of the medical correspondents of the State Board of Health, form the different sections of the State, indicate that for the month of January, taking the State at large, the amount of general sickness was very moderate.

Compared with the previous month, pneumonia and follicular tonsillitis had increased in prevalence, diphtheria, influenza, measles, croup and diarrhœa had about an equal prevalence, and bronchitis, typhoid and malarial fevers, scarlet fever and whooping cough had a considerably lessened prevalence.

Bronchitis was rather more largely prevalent in western Washington county, East Providence and Newport, measles in Pawtucket and the lower villages on the Blackstone river, and the influenza in Newport, East Providence and Washington county. No epidemic of any kind.

Compared with January, 1892, the sickness in January, 1893, was about 40 per cent. less, bronchitis, pneumonia and the epidemic influenza having very large prevalence in the corresponding month in 1892.

Compared with the previous month, the mean temperature was 9 degrees colder, i. e. nearly 11 degrees below the freezing point, the relative humidity the same, the velocity of the wind one mile per hour greater and more largely from the north, the amount of cloud slightly larger, the amount of melted snow and rain 2 inches greater in January.

Compared with the corresponding month in 1892, the mean temperature was 9 degrees colder, the relative humidity about the same, the velocity of the wind one mile per hour less, the amount of cloud rather less, the amount of melted snow and rain one and three-quarter inches less, the amount of snow fall twelve and one-quarter inches more in January, 1893.

February.

Reports of the medical correspondents of the State Board of Health, for February, 1893, indicate that the amount of general sickness in much the larger part of the State, was scarcely an average of the corresponding month during the last five years.

Compared with the previous month, croup, measles, whooping cough and tonsillitis, had increased somewhat in area of prevalence and in number, bronchitis, influenza and pneumonia, continued about the same, while diarrhœa, diphtheria, and scarlet fever had lessened slightly in general prevalence. Typhoid and malarial fever had only very small areas of prevalence and were very few in number.

Measles had quite large prevalence in Woonsocket, the vicinity of Valley Falls, Johnston and Providence. It was also quite prevalent among the students at the East Greenwich Academy. German measles were present in East Providence.

Scarlet fever had considerable prevalence in Providence, Johnston, Cranston and Warwick.

Compared with February, 1892, there was less of general sickness, and very much less of bronchitis, influenza and pneumonia in February, 1893.

Compared with the previous month the mean of barometric readings was one-sixth inch higher; the mean temperature six and three-quarter degrees higher; the relative humidity the same; the mean velocity of the wind one mile per hour greater and prevailing direction the same; the mean amount of cloud the same; the amount of melted snow and rain about four and one-half inches greater; the amount of snow fall eighteen and one-half inches greater.

Compared with the corresponding month in 1892, the mean temperature was two and one-fifth degrees colder; the relative humidity and mean velocity of the wind about the same; the amount of cloud one-tenth less; the amount of melted snow and rain six and one-sixth inches greater; and the snow fall twenty-eight inches greater.

March.

For the month of March, taking the State at large, according to the reports of the medical correspondents of the Board, the amount of general sickness was rather larger than in the preceding month, but not larger in proportion to the population than the average in the same month during the last five years. In a very few localities only, was there an unusual amount.

The special diseases varied quite largely in amount of prevalence. Bronchitis, croup, diphtheria, influenza, scarlet fever and tonsillitis were reported as having a prevalence equally as large as in the preceding month, diarrhœa, malarial fever, typhoid fever, pneumonia and whooping cough, as having a smaller prevalence, and measles as having a larger prevalence.

Measles had large prevalence in Pawtucket, Warwick, East Providence, and the vicinity of Central and Valley Falls. Scarlet Fever had very considerable prevalence in western Warwick and along the northwest branch of the Pawtuxet river, and in Providence city and adjoining towns.

Compared with the preceding month, the mean of barometric readings was nearly the same; the mean temperature was seven and two-tenths degrees higher; the mean relative humidity and mean velocity of the wind the same; the mean amount of cloud almost the same; the amount of melted snow and rain two and one-quarter inches less; the depth of snow-fall, thirty and one-half inches less.

Compared with the month of March, 1892, the mean of barometric readings was one-tenth of one inch less; the mean temperature one and one-half degrees higher; the mean relative humidity was seven one-hundredths greater; the mean velocity of the wind one mile per hour less; the mean amount of cloud one-twentieth more; the amount of melted snow and rain, one and one-seventh inches larger; the depth of snow-fall, twelve and one-half inches less in March, 1893.

April.

The reports of the medical correspondents of the State Board of Health, were not complete for the whole State for April, Woonsocket city and six towns not reporting. The reports received indicate a full amount of general sickness as compared with the previous month, with an increased amount of bronchitis, influenza and tonsillitis, the last two having almost, if not quite, epidemic proportions in some localities. Croup, diarrhœal diseases and pneumonia continuing in about equal numbers, and diphtheria, typhoid fever, measles, scarlatina and whooping cough in diminished numbers, except in a few localities. Scarlet fever had considerable prevalence in Providence city, Cranston and Warwick.

Rather more than one-half of the correspondents reported an increased amount of general sickness, about one quarter an equal amount and nearly one-quarter a lessened amount, as compared with the month of March. Compared with the preceding month, the mean atmospheric pressure was almost the same; the mean temperature was ten and one-third degrees higher; the mean relative humidity one-twentieth less; the mean velocity of the wind one mile per hour less; the mean amount of cloud about one-fourteenth greater; the amount of melted snow and rain about one inch less.

Compared with April, 1892, the mean of atmospheric readings was almost the same; the mean temperature three degrees lower; the relative humidity one-tenth greater; the mean velocity of the wind the same; the amount of cloud was about one-tenth greater; the amount of melted snow and rain was three and one-eighth inches greater in April, 1893.

May.

According to the reports of the medical correspondents in the different sections of the State, the amount of general sickness throughout the State in May did not vary much, if any, from that of the preceding month. Two-fifths of the observers in different localities reported a rather larger amount, two-fifths a less amount and one-fifth an equal amount.

Of the special diseases, bronchitis, croup, diphtheria, influenza, pneumonia and tonsillitis had slightly decreased in prevalence, typhoid fever and scarlet fever had held about an equal number, and diarrhœal diseases, malarial diseases and measles, had increased in prevalence, compared with the previous month.

Whooping cough was not reported from any locality. Measles was reported as epidemic in East Greenwich and Glocester. Scarlet fever was somewhat prevalent in parts of Providence city and adjoining towns, and also in parts of Warwick, Coventry and Cumberland.

Compared with the previous month the mean of barometric readings was one-fifth inches less; the mean temperature was twelve degrees higher; the relative humidity exactly the same; the mean velocity of the wind and the amount of cloud very nearly the same; the amount of rain-fall, one and three-fourths inches greater in May.

Compared with the corresponding month in 1892, the mean of barometric readings was slightly less; the mean temperature was less than one degree higher; the mean relative humidity about the same; the mean velocity of the wind the same; the amount of cloud, one-tenth less; the amount of rain-fall, one-sixth inch more in 1893.

June.

According to the reports from the regular correspondents in the different parts of the State to the State Board of Health, the amount of general sickness in June was not unusually large. In some parts the respiratory diseases had rather large prevalence for the season, while the diarrhœal diseases were more tardy in appearing.

Compared with the previous month, cholera infantum, croup and measles were reported from a larger number of localities; bronchitis, diphtheria, typhoid fever, influenza, pneumonia and scarlet fever were reported as having a lessened prevalence, taking the State at large, and malarial diseases, influenza and whooping cough remaining about the same.

Scarlet fever and measles were somewhat prevalent in Providence and vicinity, and measles in Kent county.

Compared with June, 1892, the respiratory diseases were more prevalent and the diarrhœal diseases less prevalent in June, 1893.

Compared with the corresponding month in 1892, the mean of barometric readings was the same, the mean temperature five degrees lower, the relative humidity one-sixteenth greater, the mean velocity of the wind and amount of cloud about the same, the rain-fall three-fourths of an inch greater in June, 1893.

July.

Reports from the medical correspondents indicate that for July the amount of general sickness was no more than the average for the season in any section of the State, and rather less than the average in a considerable number of the towns.

Compared with the preceding month, bronchitis, croup, influenza, pneumonia, tonsillitis and whooping cough, had largely decreased in amount of prevalence, diphtheria, measles, malarial diseases and scarlet fever, holding about the same area and number; typhoid fever was reported from a large number of places, and cholera infantum from a much larger number of places and increased number of cases.

No disease was epidemic in any locality, although measles had quite a large prevalence in the lower villages of the southwest branch of the Pawtuxet river, and considerable prevalence in the vicinity of the Posneganset.

Compared with the corresponding month in 1892, the diarrhœal diseases were less prevalent in 1893, and the acute respiratory diseases rather more prevalent.

The infectious diseases were less in area of prevalence than in 1892.

Compared with July, 1892, the mean atmospheric pressure was rather less, the mean temperature nearly three degrees cooler, the mean relative humidity slightly less, the mean velocity of the wind one mile per hour greater, the mean amount of cloud the same, the rainfall one-quarter inch less in 1893.

August.

According to the reports of the medical correspondents of the State Board of Health, the amount of general sickness in August was no more than the average in the State at large for the same month during the last five years, and rather less than in August, 1892.

Compared with the preceding month, bronchitis, croup, pneumonia, influenza and tonsillitis, were very much less prevalent, and were not even named in reports from some localities.

The reports also indicate a lessened prevalence of diphtheria, measles, scarlatina and whooping cough, and a slightly increased prevalence of cholera infantum and other diarrhœal diseases.

No epidemic prevalence of any disease reported.

Compared with the corresponding month in 1892, the respiratory and contagious diseases were in about the same measure of prevalence, the diarrhœal diseases rather less frequent and typhoid fever considerably less in amount in 1893.

Compared with August, 1892, the mean of barometric readings, the mean temperature, the mean relative humidity and the mean velocity of the wind were almost exactly the same, the mean amount of cloud about one-tenth less, and the amount of rainfall one and one-sixth inches greater.

According to the monthly return of deaths registered in the towns and reported to this office, the mortality from diarrhœal diseases during the summer months of 1893, as compared with the mortality during the same months of the five preceding years, was as follows:

	1888.	1889.	1890.	1891.	1892.	1893.
Cholera Infantum	334	280	432	358	394	345
Cholera Morbus	39	22	24	11	20	15
Diarrhœa	50	61	44	39	38	42
Dysentery	55	43	68	33	23	5
Enteritis, Gasto and Colo	..	..	52	56	89	65
Total	522	445	620	497	554	472

September.

The medical correspondents in the various parts of the State report a less degree of general sickness than for the preceding month, though some diseases show a greater prevalence in certain localities.

Bronchitis, croup and pneumonia begin to manifest themselves more emphatically, especially the latter; but this prevails less extensively than for the same period in 1892. Tonsillitis is reported in a few localities.

There is an abatement of cholera infantum, dysentery and the diarrhœal diseases generally, with the approach of cooler weather; they being chiefly confined to the warmer months of the year.

Among contagious and infectious diseases we note the appearance of whooping cough and measles in one or two localities. Little or no typhoid fever is reported. Scarlet fever prevailed largely in Valley Falls, and a few cases of it appeared in Arctic. But this disease is not epidemic in any part of the State, though considerably more prevalent than during the corresponding month for 1892.

Compared with September, 1892, there was but a slight increase in the general sickness, but in no greater ratio than for the last two years.

October.

According to the reports of the medical correspondents of the State Board of Health the amount of general sickness in the State at large is very much less than during the previous month.

Bronchitis was unusually prevalent in East Providence; scarlet fever in Pawtucket and Valley Falls, measles in River Point and Coventry, and whooping cough in East Greenwich.

Diphtheria was named in a few towns only, but was not especially prevalent nor of a severe type.

Typhoid fever not so prevalent as usual.

No epidemic prevalence of any disease reported.

The number of cases of contagious diseases reported to the Superintendent of Health in Providence during the month were: Diphtheria, 20; scarlet fever, 34; typhoid fever, 17.

From a perusal of the returns of death it will be seen that there was a preponderance of diseases of the air passages. There were 14 deaths from bronchitis, 39 from pneumonia and 39 from consumption.

The average deaths from consumption reported during the year have been 50 per month.

This month's returns will indicate that there are 11 less than the average.

The number of deaths from consumption during 1892 was 754, or an average of 62.8 deaths per month.

The percentage of deaths by consumption to deaths from all causes during the month is 8 per cent., which is much less than the average.

November.

The amount of general sickness throughout the State was somewhat less for the month of November than the average as shown by the medical correspondents of the *Bulletin*, except in Hope Valley and East Providence.

An unusual prevalence of bronchitis existed in most sections of the State.

Diphtheria, typhoid fever, influenza and whooping cough existed in unusual amount in East Providence.

The number of contagious diseases reported to the Superintendent of Health in the city of Providence were: Diphtheria, 12; scarlet fever, 29; typhoid fever, 21.

From the returns of deaths from twenty-two towns it is evident that there were deaths from diseases of the air passages to the number of 96, there being 21 deaths from bronchitis, 33 from pneumonia and 42 from consumption.

This shows twenty deaths less for consumption than the average per month during the year 1892.

December.

According to the reports of the medical correspondents of the State Board of Health, the general amount of sickness in the State at large was very much more than during the previous month.

Bronchitis and pneumonia were especially prevalent in all districts.

Influenza has made itself manifest in epidemic form, large numbers of cases being reported and no part of the State being exempt.

The type of the disease is somewhat different than its first appearance, three years ago, not being as severe in its manifestations.

Whooping cough prevailed in East Greenwich, Pawtucket, Providence and East Providence.

Scarlet fever was prevalent in Providence, East Providence, Pawtucket, and in the town of Lincoln, also in Hope Valley and Richmond.

The number of contagious and infectious diseases reported to the Superintendent of Health of Providence, and from the Health Officer of the Town of Lincoln are as follows:

	Diphtheria.	Scarlet Fever.	Typhoid Fever.
City of Providence........	16	53	19
Town of Lincoln.........	1	15	0

From the returns of deaths from twenty-eight towns, it is noted that there were 83 deaths from pneumonia, which is 50 more than the previous month, and 29 more than the monthly average of the *whole* State in 1892. From bronchitis, 29; consumption, 43; diphtheria, 14; scarlatina, 15, and influenza, 36.

SECRETARY'S REPORT.

HEALTH IN THE TOWNS.

1893.

HEALTH OF TOWNS.

PHYSICIANS' REPORTS.

In order to present, from year to year, a connected history of the comparative prevalence of zymotic and other important diseases, and especially when of epidemic occurrence, it has seemed necessary that there should be given an account of the diseases occurring in the different towns during each year; that is, as to the amount of general sickness, the kinds and type of zymotic and other acute diseases that have had prevalence; the relative number compared with other years; general severity, season of occurrence, and locality of special prevalence; and also other facts in relation to the sanitary sentiment of the communities, and suspected sources of ill health.

Therefore, as in previous years, the plan of soliciting from the regular medical correspondents of the Board, and other physicians, a report at the commencement of each year, covering, in a general way, the whole of the preceding year, in relation to the amount of sickness of all kinds; the prevalence of particular diseases; and the sanitary conditions and movements in their respective localities, has been continued, and the circular presented on the following page sent therefor.

Office of the Secretary of the State Board of Health.

CIRCULAR No. 128.

PROVIDENCE, January 1, 1894.

The Secretary of the State Board of Health desires to obtain from respectable physicians in every section of the State an Annual Report covering the whole twelve months preceding the above date.

The following questions will indicate the information sought, and the general plan of such report; but correspondents need not be confined to replies to the questions presented, all the freedom being allowable of such additions as the circumstances or peculiarities of each locality may seem to warrant.

These annual reports are desired for the purpose of presenting the status of the public health and the sanitary sentiment existing in the different sections of the State, during the year 1893, in the Sixteenth Annual Report of the State Board of Health.

They should be returned to the Secretary of the Board by the third week in January if possible.

Any additional postage stamps needed to cover postage on more extended consideration of the topics suggested, or any other topic having relation to the public health, will be immediately refunded on receipt of papers.

QUESTIONS.

1. Name of town and circuit.

2. Including sickness of all kinds, has the general amount been more or less in your circuit during the past year than the average of previous years? What proportion?

3. If any of the following zymotic diseases have prevailed in your circuit during the past year, please state when sporadic and when epidemic, whether mild, average or severe, and in what months they occurred, and in what localities.

	Sporadic or Epidemic.	Degree of Severity.	Months.	Locality.
a. Cholora Infantum.				
b. croup.				
c. Diarrhœa and Dysentery.				
d. Diphtheria.				
e. Fever, Malarial.				
f. Fever, Typhoid.				
g. Influenza.				
h. Measles.				
i. Scarlatina.				
j. Whooping Cough.				
4. Any other zymotic diseases epidemic.				
5. Of other diseases not specially zymotic.				

Also, please state what degree of prevalence, whether large, average or small, and in what months was the occurrence of the following named diseases. State degree of prevalence and time of occurrence under the headings following:

	DEGREE OF PREVALENCE.	MONTHS.
k. Brain, Inflammation and Congestion of.		
l. Bronchitis, Acute.		

	Degree of Prevalence.	Months.
m. Pneumonia.		
n. Rheumatism.		
o. Stomach, Acute diseases of.		

6. What other disease have had unusually large prevalence during the past year?

7. What diseases have been attended with unusual fatality?

8. Had the sanitary surroundings of any of the cases of the following diseases been such as to promote their occurrence? What proportion of the cases, if any?

Diphtheria.

Typhoid fever.

Scarlet fever.

9. Has there been, in your opinion, any advance in public sentiment or views of individuals, in your circuit, in regard to the importance of sanitary surroundings: or any increased interest in means of preventing diseases? State what reason for belief.

10. Is effective isolation and disinfection, in cases of infectious and contagious diseases, practiced in your circuit?

11. Name of Physician, M. D.

Very respectfully,

Gardner T. Swarts,

Sec. State Board of Health.

The following extract from the Public Statutes, in relation to the duties of town and local boards of health, and practicing physicians, was also appended:

PUBLIC STATUTES, CHAPTER 83.

SEC. 6. The secretary of the said board shall make inquiry from time to time, of the clerks of town and local boards of health and PRACTICING PHYSICIANS, in relation to the prevalence of any disease, or knowledge of any known or generally believed source of disease, or causes of general ill health, and also in relation to the proceedings of the said boards of health in respect to acts for the promotion and protection of the public health, and also in relation to diseases among domestic animals in their several towns and localities respectively; and the said clerks of town and local boards of health, and the said PRACTICING PHYSICIANS shall give such information, in reply to said inquiries, of such facts and circumstances as shall have come to their knowledge.

REPLIES.

The reports, on the following pages, received from local correpondents and others of the medical profession in the several cities, towns and villages of the State, will give a good representation of the general status of the public health during the year 1893, as to the presence or absence of epidemics or endemics, or large prevalence of important or unusual diseases in the several locations, the sanitary conditions and improvements, if any, in their several circuits, and other suggestions in response to the preceding circular.

ANNUAL REPORTS OF PRACTICING PHYSICIANS.

BRISTOL COUNTY.

1. Bristol.

2. Including sickness of all kinds there has been about one-fifth less.

3. Cholera Infantum. Sporadic. Very severe. August. Widely separated.

Croup. No cases.

Diarrhœa and Dysentery. Sporadic. Mild. June and August. Widely separated.

Diphtheria. No cases.

Fever, Malarial. One case. Very severe. February to May. No good drainage.

Fever, Typhoid. One case. Fatal. Last of July and August.

Influenza. Epidemic. Mild and severe. March and December.

Measles. Epidemic. Mild. June and July.

Scarlatina. No cases.

Whooping Cough. No cases.

4. None.

5. No.

Brain, Inflammation and Congestion of. No cases.

Bronchitis Acute. Not very many cases. March and December.

Pneumonia. Two cases. Severe. September and October.

Rheumatism. No special prevalence. Cases all the time.

Stomach, Acute Diseases of. No cases.

6. Two cases Appendicitis.

7. One Pneumonia. Fatal. One Typhoid. Fatal.

8. Typhoid Fever. Patient lived in locality where the disease had formerly been prevalent, i. e., near reservoir of N. I. R. Co.

9. Not much advance as most of the people are ignorant of the value of proper plumbing, and wedded to the use of well-water.

10. I should not say that isolation was effective, though it has been tried.

W. Fred Williams, M. D.

1. Hopeworth Sanitarium, Bristol, R. I.

2. Same.

3. Diarrhœa and Dysentery. Two cases. Chronic.

Influenza. One case. Very severe. February.

Measles. One case. Mild. May.

4. Mumps. Two cases. May.

5. Chronic Diseases.

Bronchitis, Acute. Very prevalent. March and December.

6. Neurasthenia.

8. No.

10. Yes. In the few cases observed here.

W. C. CANFIELD, M. D.

1. WARREN AND BARRINGTON.

2. Less. Ten per cent.

3. Cholera Infantum. Sporadic. Mild. Summer.

Croup. Sporadic. Winter.

Diarrhœa and Dysentery. Sporadic. Mild. Summer.

Diphtheria. Sporadic. Mild. Fall and Winter.

Fever, Malarial. Sporadic. Mild. Fall and Winter.

Fever, Typhoid. Sporadic. Mild. Fall and Winter.

Influenza. Epidemic. Severe. Fall and Winter.

Measles. Sporadic. Mild. Fall and Winter.

Scarlatina. None.

Whooping Cough. Sporadic. Mild. Fall and Winter.

5. Bronchitis, Acute. Severe. Winter and Spring.

Pneumonia. Severe. Winter.

Rheumatism. Severe. Winter.

Stomach, Acute Diseases of. Mild.

7. Pneumonia.

8. Diphtheria. One-half cases due to bad surroundings, drainage, etc.

Typhoid Fever. Due to bad surroundings, drainage, etc.

9. None.

10. Yes.

G. L. CHURCH, M. D.

1. DROWNVILLE and vicinity.

2. Rather more during Winter months; usual amount in Summer.

3. Croup. Sporadic. Not severe. October, November, December.

Diarrhœa and Dysentery. Sporadic. Mild. July, August, September.

Diphtheria. Few cases. Quite severe. November, December.

Fever, Malarial. Always more or less of intermittent fever in this vicinity; but usually easily subdued. In some localities disease is violent.

Fever, Typhoid. Sporadic. Mild. September, October.

Influenza. Few mild cases in early part of the year.

Measles. Sporadic. Degree of severity rather more than usual. May, June, July.

Whooping Cough. Sporadic. Not severe. May, June.

4. Numerous cases of German Measles in November and December.

5. Brain, Inflammation and Congestion of. More than usual. November, December.

Bronchitis, Acute. Common in Winter months.

Pneumonia. Little. December.

Rheumatism. Very little. None of Acute Rheumatism.

Stomach, Acute Diseases of. Few cases. July, August, September.

9. Epidemics not common in this vicinity, and people have little cause to study or investigate methods of preventing diseases. Most dwellings are sanitarily surrounded. A marked exception being wrecks of buildings in which Italian laborers are quartered. These would be hot-beds of contagion to any but the invulnerable.

10. Only so much as infected families may choose.

A. C. Pierce, M. D.

KENT COUNTY.

1. Coventry and portions of adjoining towns.

2. More. About one-tenth with me.

3. Cholera Infantum. Sporadic. Severe. Summer. Villages.

Croup. A few mild cases in Winter months.

Diarrhœa and Dysentery. Sporadic cases occasionally throughout the year, and of average severity.

Diphtheria. Only one genuine case, which recovered, but had many cases of severe Tonsilitis.

Fever, Typhoid. Two cases during the Fall. Every precaution was taken to avoid spreading.

Influenza. Large prevalence, but not as severe as last year.

Measles. Many mild cases in Fall months.

Scarlatina. Only one case which was severe, but recovered.

Whooping Cough. About the average amount.

4. No.

5. Brain, Inflammation and Congestion of. Few mild cases in Winter.

Bronchitis, Acute. Average amount in Autumn and Winter.

Pneumonia. Less than the average number and quite mild.

Rheumatism. Very prevalent throughout the year.

Stomach, Acute Diseases of. But very few mild cases.

6. None.

7. None.

8. No.

9. I think our citizens are being educated in relation to sanitary matters, as they are much more particular about sink drains, &c.

10. I am very particular in regard to this wherever I go.

F. B. SMITH, M. D.

1. COVENTRY.

2. About an average.

3. Cholera Infantum. Sporadic. Mild. July, August. Villages of Pawtuxet Valley.

Croup. Sporadic. Mild. January, February, March. Pawtuxet Valley.

Diarrhœa and Dysentery. Sporadic. Mild. All year. Pawtuxet Valley.

Diphtheria. Sporadic. Mild. All year. Pawtuxet Valley.

Fever, Malarial. Sporadic. Mild. All year. Pawtuxet Valley.

Fever, Typhoid. Sporadic. Severe. October. Arctic Center.

Influenza. Sporadic. Mild. December. Villages.

Measles. Epidemic. Mild. January, February, March. Villages.

Scarlatina. Epidemic. Severe. October. Crompton.

Whooping Cough. Sporadic. Mild. March. Crompton.

4. None.

5. None.

Pneumonia. Large. December, January, February, March.

Rheumatism. Large. December, January, February, March.

6. None.

7. Typhoid Fever.

8. Diphtheria. Yes. One-half.

Typhoid Fever. Yes. One hundred per cent.

Scarlet Fever. Yes. One-half.

9. No.

10. Isolation. No. Disinfection. Yes.

JOHN WINSOR, M. D.

1. EAST GREENWICH.

2. There has been about the average amount of sickness during the past year.

3. Cholera Infantum. Sporadic. Average degree of severity. Summer. Village and country.

Croup. Average amount of false croup. No true croup.

Diarrhœa and Dysentery. Sporadic. Average degree of severity. Summer. Village and country.

Fever, Malarial. Sporadic. Average degree of severity. Autumn. Warwick.

Fever, Typhoid. One case in March. Severe.

Influenza. Quite prevalent. Average degree of severity. February and March. Villages and country.

Measles. Prevalent. Average degree of severity. January, February, March. At East Greenwich Academy, spreading to village.

Scarlatina. Very few cases during the year.

Whooping Cough. Epidemic. Average degree of severity. October, November, December. Village.

4. Influenza epidemic, latter half of December.

5. No.

Brain, Inflammation and Congestion of. Average degree of prevalence. Summer months.

Bronchitis, Acute. Quite prevalent. February and March.

Pneumonia. Average degree of prevalence. January, February, March, November.

Rheumatism. Less than average degree of prevalence. Few cases in Spring and Fall months.

Stomach, Acute Diseases of. Average degree of prevalence. Summer.

6. None.

7. None.

8. Typhoid Fever. Cause found on premises.

Scarlet Fever. No cause found on premises.

9. The question of sewerage in the village is being strongly agitated.

10. Tolerably well, but isolation has not been such as it should be, as we have no law making it compulsory.

E. G. Carpenter, M. D.

1. East Greenwich and vicinity.

2. I think it would average about the same as last year. An increase if anything.

3. Cholera Infantum. Sporadic. Not severe. July and August. East Greenwich.

Croup. Sporadic. Quite severe. March and October. Greenwood and East Greenwich.

Diarrhœa and Dysentery. About the usual number of cases. Not particularly severe. July, August and September. East Greenwich.

Diphtheria. Sporadic. Severe. September. East Greenwich.

Fever, Malarial. Sporadic. Severe. April and May. Hills Grove.

Fever, Typhoid. Sporadic. Quite severe. November and December. Sand Hill.

Influenza. Epidemic. Quite severe. March, April, November, December. Over whole territory.

Measles. Epidemic. Severe. January, February, March, April. Over whole territory.

Scarlatina. Sporadic. Severe. May. East Greenwich.

Whooping Cough. Epidemic. Severe in most cases. August, September, October, November, December. East Greenwich and Apponaug.

4. No.

5. Jaundice and Acute Articular Rheumatism have prevailed to a very considerable extent during the Fall and Spring months.

Brain, Inflammation and Congestion of. Quite prevalent. Spring and Autumn.

Bronchitis, Acute. Average. Spring.

Pneumonia. Rather more than average. Spring and Autumn.

Rheumatism. Acute Rheumatism. Very prevalent. Autumn.

Stomach, Acute Diseases of. Small. Summer.

6. None other than those mentioned.

7. Nothing unusual.

8. Yes. In quite a number of cases.

Diphtheria. Small. Caused directly by unsanitary condition of surroundings. September.

Typhoid Fever. Small. Contracted probably in Providence. November.

Scarlet Fever. Large. December.

9. Yes. We are on the verge of obtaining a system of public sewerage.

10. Yes. As far as possible in the country.

CHAS. H. EARLE, M. D.

1. RIVER POINT, WARWICK.

2. About the same. Increase the first six months. Decrease the latter.

3. Cholera Infantum. Average during the Summer.

Croup. Average.

Diarrhœa and Dysentery. Average.

Diphtheria. Average.

Influenza. Epidemic the last of December. Severe among aged.

Measles. Sporadic cases through whole year.

Scarlatina. Sporadic cases through the whole town during the year. Several malignant cases in Pawtuxet.

Whooping Cough. Very few cases.

4. Small Pox appeared here in March. Source not known. Eight cases oc-

curred, all confined to one house, a four tenement block. None fatal. Strict quarantine kept.

5. Bronchitis, Acute. Average. Spring and Fall.

Pneumonia. Average. Spring and Fall.

Rheumatism. During the Summer months, more than usual.

9. An ordinance passed by the Town Council, October 23, 1893. (See report of Health Officer).

10. Yes. In cases of Scarlet Fever, Small Pox and Diphtheria

Albert G. Sprague, M. D.

NEWPORT COUNTY.

1. Newport.

2. I judge less.

3. Cholera Infantum. Sporadic.

Croup. Sporadic. Fatal.

Diarrhœa and Dysentery. Sporadic. Not severe.

Diphtheria. Sporadic. Not severe.

Fever, Malarial. Sporadic. Not severe.

Fever, Typhoid. Sporadic.

Influenza. Epidemic. Not severe.

Scarlatina. Sporadic. Not severe.

Whooping Cough. Cases nearly all through the year, but I was rarely consulted even in my own families. Not severe.

5. My observations would lead me to say that there has been no unusual prevalence or severity aside from Grippe with its various manifestations.

8. Diphtheria. Not within my knowledge.

Typhoid Fever. Yes, I understand so, but not under my observations.

Scarlet Fever. Not under my observations.

9. Very much advance. In every way the community is being educated to look for a cause for cases of sickness.

10. Yes.

Mary E. Baldwin, M. D.

1. Newport.

2. About the same.

3. Cholera Infantum. Sporadic. Mild. July, August, September.

Croup. Sporadic. Average. November.

Influenza. Epidemic. Severe. January, February, December.

Scarlatina. Epidemic. Mild. Since March.

Whooping Cough. Epidemic. Average. November, December.

5. Bronchitis, Acute. Large. November, December.

7. None.

8. No.

9. I notice a growth in the belief among otherwise ignorant people of the contagiousness of consumption.

10. As much as possible.

ANNIE NEWS, M. D.

PROVIDENCE COUNTY.

1. EAST PROVIDENCE, EAST PROVIDENCE CENTRE AND RUMFORD.

2. About the same as last year.

3. Cholera Infantum. Sporadic. Average. July, August.

Diarrhœa and Dysentery. Sporadic. Severe. Summer.

Diphtheria. Sporadic. Severe. September.

Fever, Malarial. More or less all the time. Average.

Fever, Typhoid. Sporadic. Mild. June, November, December.

Influenza. Epidemic. Severe. December.

Scarlatina. Twenty cases. Average. October. November, December.

Whooping Cough. Epidemic. Severe. Through the Fall and Winter.

4. Rotheln (German Measles.) Average. November, December.

5. Bronchitis, Acute Large amount. November, December.

Pneumonia. Very prevalent. December.

6. None.

7. None, unless Scarlatina.

8. No.

9. Yes. Reason—the way the Scarlet Fever was handled.

10. Yes, or nearly so as possible.

ELMER E. MOORE, M. D.

1. GLOCESTER AND BURRILLVILLE.

2. Average.

3. Cholera Infantum. Sporadic. Severe. September. Mapleville.

Diarrhœa and Dysentery. Sporadic. Average. Warm. Not localized.

Fever, Typhoid. Sporadic. Average. September, October. Outlying.

Influenza. Epidemic. Mild. May and December. Not localized.

Measles. Epidemic. Average. June to September. Burrillville.

Scarlatina. Epidemic. Mild. December. Burrillville and Glocester.

4. None.

5. Brain, Inflammation and Congestion of. Small.

Bronchitis, Acute. Average. Colder months.

Pneumonia Small. Colder months.

Rheumatism. Average. Colder months.

Stomach, Acute Diseases of. Average. Summer.

7. None.

8. Typhoid Fever. Isolated cases only. Causes not apparent.

Scarlet Fever. No.

9. No.

10. Yes.

G. A. HARRIS, M. D.

1. PAWTUCKET.

2. Less. Perhaps one-eighth. This is only an impression.

3. Cholera Infantum. Sporadic. Mild. During Summer months.

Croup. A very little during Spring and Fall.

Diarrhœa and Dysentery. A small amount during Summer months.

Diphtheria. Sporadic. Mild. Some in the Spring and Fall.

Fever, Malarial. Considerable all the year, but mild and less than previous few years.

Fever, Typhoid. Sporadic. Mild. A little all the Fall.

Influenza. None until December. Milder than in former years.

Measles. Sporadic cases in Spring and Summer.

Scarlatina. Sporadic cases all the year. Average severity.

Whooping Cough. Small amount.

4. No.

5. Brain, Inflammation and Congestion of. Small.

Bronchitis, Acute. Average. Winter and Fall.

Pneumonia. Small.

Rheumatism. Average

Stomach, Acute Diseases of. Average.

6. None.

7. None.

9. Yes. Health Department more active. More sewers.

10. Has not been, but is to be in 1894.

F. B. FULLER, M. D.

1. PAWTUCKET.

2. About the same.

3. Cholera Infantum. Average number. Summer.

Croup. Three fatal cases. October. Meadow St. and Pierce St.

Diarrhœa and Dysentery. Usual number.

Diphtheria. Six cases. Three very severe.

Fever, Malarial. Very abundant.

Fever, Typhoid. Forty cases in twelve months. One fatal.

Influenza. Very prevalent in December, 1893.

Measles. Average number.

Scarlatina. Only a few cases.

Whooping Cough. Usual number.

5. Brain, Inflammation and Congestion of. Two cases of Meningitis and a few cases of Paresis.

Bronchitis, Acute. Very prevalent in December, 1893.

Pneumonia. Lobular Pneumonia very prevalent in December, 1893.

Rheumatism. Usual number.

Stomach, Acute diseases of. Usual number.

8. No.

9. Yes. Action of the council.

10. Yes, so far as my cases are concerned.

M. W. KELLIHER, M. D.

1. VALLEY FALLS.

2. Average amount.

3. Croup. Sporadic. Average. Spring.

Diarrhœa and Dysentery. Average. Fall.

Diphtheria. Sporadic. Mild. Winter. High St. and Broad St.

Fever, Malarial. Sporadic. Average. May to October. General.

Influenza. Sporadic. Mild. Winter. General.

Measles. Sporadic. Average. Winter. General.

Scarlatina. Sporadic. Average. May to December. General.

Whooping Cough. Sporadic. Mild. Winter.

4. No.

5. Bronchitis, Acute. Average. Spring and Fall.

Pneumonia. Small. Winter and Spring.

Rheumatism. Average. Winter.

6. None.

7. None.

8. No.

9. Greater precautions have been taken against the spread of contagious diseases by the authorities and the public.

10. It has been attempted.

GEO. B. HAINES, M. D.

1. PROVIDENCE.

2. Less. Ten per cent.

3. Influenza. Average in severity and prevalence.

8. Impossible to decide.

9. Yes. From inquiries from families regarding methods of preventing diseases.

10. Isolation and disinfection fairly tried, but time alone will decide with what benefit.

P. S. REDFIELD, M. D.

1. SCITUATE and parts of adjoining towns.

2. There was an increase of ten to fifteen per cent. in amount of sickness, over the average of previous years, for the year closed. This increase was due to recurrence of La Grippe in May, also in December.

Croup. Epidemic. Average severity. December. Rockland.

Diarrhœa and Dysentery. Sporadic. Average to severe. Autumn. Scituate.

Diphtheria. Sporadic. Severe. November. Foster.

Fever, Malarial. Sporadic. Dumb Ague. Various months. Chopmist and South Scituate.

Fever, Typhoid. Sporadic. Severe. April. South Scituate.

Influenza. La Grippe. Epidemic. Very severe. May and December. Entire circuit.

Measles. Epidemic. Severe. April and May. Chopmist and North Foster.

Scarlatina. Sporadic. Very severe. December. Scituate.

5. Peritonitis.

Brain, Inflammation and Congestion of. A few cases. June.

Bronchitis, Acute. Very large amount. Spring and Fall mostly.

Pneumonia. Of Broncho-Pneumonia a few cases. Spring months.

Rheumatism. Average amount. Winter months.

Stomach, Acute Diseases of. Average prevalence. All seasons.

6. None.

7. None.

8. Diphtheria. Sanitary surroundings quite poor.

Typhoid Fever. In one case the sanitary surroundings bad.

9. There is some advance towards sanitary improvements. Improved educational methods generally.

10. Isolation and disinfection practiced so far as possible.

BARNARD ARNOLD AND CHARLOTTE E. C. ARNOLD, M. D's.

1. WOONSOCKET.

2. About the same amount.

3. Cholera Infantum. Average. July and August. All over city.

Croup. Sporadic. Average. March and December. All over city.

Diarrhœa and Dysentery. Sporadic. Average. July and August. All over city.

Diphtheria. Sporadic. Mild. December. All over city.

Fever, Malarial. Mild. May and September. All over city.

Fever, Typhoid. Few cases. Mild.

Influenza. Sporadic. Mild. December. All over city.

Scarlatina. Epidemic. Mild. October, November, December. All over city.

Whooping Cough. Epidemic. Mild. April, May. All over city.

4. No other.

5. Bronchitis, Acute. Sporadic. Mild. January, February, March, April.

Pneumonia. Few cases.

Rheumatism. Few cases. Winter.

7. No particular.

8. Yes. Bad drainage, bad cesspools and want of cleanness in yards and cellars.

9. Yes. I heard of this feeling through position as Health Officer.

10. Yes.

JOSEPH C. MARANDA, M. D.

WASHINGTON COUNTY.

1. HOPE VALLEY and vicinity.

2. About an average. Less Influenza (La Grippe) than the previous year.

3. Cholera Infantum. Sporadic. Mild. August and September.

Diarrhœa and Dysentery. Sporadic. Of average degree. About seventy cases occurred in July, August and September, and a few cases scattered through other months of the year.

Fever, Malarial. Sporadic. In July, September, November and December. A few sporadic cases. Mild.

Fever, Typhoid. No Typhoid Fever in Hope Valley. One case in Canonchet, three miles from here.

Influenza. Quite prevalent in January, February and March. Not so severe as in the previous year.

Whooping Cough. In March, July, September, November and December. Rather mild with a few exceptions. One death in September from pneumonic complications.

5. Brain, Inflammation and Congestion of. One case in March. Died.

Bronchitis, Acute. Has prevailed each month in the year. Most prevalent January, March, May, November and December.

Pneumonia. Has averaged about as in other years—perhaps one-tenth more.

Rheumatism. Rather less than an average.

Stomach, Acute Diseases of. A larger number of cases.

7. None.

8. No.

9. No change.

10. Not entirely; but so far as public sentiment will sustain the physician.

E. P. Clarke, M. D.

1. North Kingstown.

2. Equal.

3. Cholera Infantum. Sporadic. Average. Summer.

Croup. Less than usual. Average. Spring.

Diarrhœa and Dysentery. Sporadic. Average. Rather severe than otherwise. Summer and a few in Winter months.

Fever, Typhoid. A few mild cases.

Influenza. A number of cases this Winter. Average.

Measles. Some. Epidemic in western part of town and Exeter.

4. None.

5. La Grippe at the close of the year.

Bronchitis, Acute. Very prevalent at close of year. Rather severe.

Pneumonia. A few cases among old people.

9. No change. Average.

10. No cases.

C. E. Maryott, M. D.

1. Wickford, North Kingstown and vicinity.

2. Less than the average.

3. Cholera Infantum. Sporadic. Mild. August and September.

Croup. Very few sporadic cases.

Diarrhœa and Dysentery. Average amount in Summer and Fall.

Fever, Malarial. For the first time in my residence here have had cases that originated in this locality.

Influenza. In December, 1893, began to develop and has increased. Cases milder than formerly.

Measles. A few sporadic cases in town. Epidemic in parts of Exeter in October.

4. In Spring and Fall a number of cases called by inhabitants "slow bilious fever." There is no fever but a catarrhal condition of tongue, stomach and duodenum which persists for some weeks.

5. Bronchitis, Acute. Average. Winter and Spring.

Brain, Inflammation and Congestion of. Average. Spring.

Pneumonia. Average. Summer, Winter and Spring.

Rheumatism. Average. Winter.

Stomach, Acute Diseases of. Gastric Catarrh above average through year.

7. Pneumonia.

8. No cases.

9. People here as a class are very careless about isolating the sick with contagious diseases. It is due to ignorance.

10. It is not practiced by laity and it is very hard to impress upon the mind that prevention is better than cure.

For a rural district I think Syphilis is quite prevalent. Contracted in road houses and the city of Providence.

HAROLD METCALF, M. D.

1. SOUTH KINGSTOWN, NORTH KINGSTOWN.

2. Slight increase.

3. Cholera Infantum. Sporadic.

Croup. Sporadic.

Diarrhœa and Dysentery. Sporadic.

Diphtheria. Sporadic.

Fever, Malarial. Sporadic.

Fever, Typhoid. Sporadic.

Influenza. Sporadic.

Measles. Sporadic.

Scarlatina. Sporadic.

Whooping Cough. Sporadic.

5. Pneumonian. Average.

Rheumatism. Average.

Stomach, Acute Diseases of. Average.

6. Pharyngitis.

7. None.

9. No change.

J. E. PERRY, M. D.

1. CHARLESTOWN AND RICHMOND.

2. About an average.

3. Diarrhœa and Dysentery. Sporadic. Mild. July and August.

Diphtheria. Sporadic. Average. Nearly or quite every month.

Fever, Typhoid. Sporadic. Severe. May and June. Wood River Junction.

Influenza. Epidemic. Average. January and December. Whole circuit.

Scarlatina. Sporadic. Mild. September. Shannock.
5. Bronchitis, Acute. Small. February and March.
Pneumonia. Average. January, February, March.
8. No.
9. No.
10. Yes.

A. A. Saunders, M. D.

TOWN SANITATION.

REPORTS FROM TOWNS,

IN RELATION TO SANITARY IMPROVEMENTS, ETC.

It has been observed in the previous issues, that a complete annual report of a State Board of Health properly includes an account of the measures taken each year by the municipal authorities, corporations or individuals for the promotion of the health of the communities under their respective supervision or control. In order, therefore, to ascertain the facts in relation to such measures, and for the purpose of presentation in this Report, as in the reports heretofore issued, and in the continuance of the design to keep well informed of all proceedings throughout the State, on the part of town or city councils, or any form of municipal authority, in the appointment of health officers or boards of health, and in the direction of improvements which have in view and seem to promise the promotion of public health; by the abatement of nuisances; or the removal of unsanitary conditions and surroundings; or by the introduction of water for general use or construction of sewers; or the establishment of other public works, which may not only be of great public utility and convenience, but also serve in some measure, large or small, in the prevention of disease, the Secretary has, as heretofore, solicited replies from the town and city clerks of the several towns and cities, or other municipal officers, in answer to questions proposed in a circular sent for that purpose.

It is designed and hoped that a connected history may thereby be secured of all sanitary improvements of a public character in all parts of the State, from year to year; and the gradual awakening of the citizens of the different towns to the necessity of sanitary public measures thereby be shown; and also whatever intelligent appreciation of such necessity and whatever public spirit in existence in the towns there may be, may be known as manifested by the readiness with which needed sanitary measures are adopted.

The following is the form of circular sent at close of the year 1893:

CIRCULAR No. 130.

OFFICE OF SECRETARY STATE BOARD OF HEALTH,
48 WEYBOSSET STREET,
PROVIDENCE, R. I, Jan. 1, 1894.

To the Town Clerk:

It is, by statute law, made the duty of the Secretary of the State Board of Health to make inquiries of town or city clerks, or of the clerks of local boards of health, in regard to the general health and sanitary condition of the towns, and also in regard to measures taken for the improvement of the same.

The law reads as follows:

PUBLIC STATUTES, CHAPTER 83.

SEC. 6. The Secretary of the said Board shall make inquiry, from time to time, of the clerks of town and local boards of health, and practicing physicians, in relation to the prevalence of any disease, or knowledge of any known or generally believed source of disease, or cause of general ill-health, and also in relation to the proceedings of the said boards of health, in respect to acts for the promotion and the protection of the public health, and also in relation to diseases among domestic animals, in their several towns and localities, respectively; and the said clerks of town and local boards of health, and said practicing physicians, shall give such information, in reply to said inquiries, of such facts and circumstances as have come to their knowledge.

The Secretary therefore respectfully makes the following inquiries:

1. Has any work for the promotion of public health been contemplated or completed in your town by the town authorities, or by private enterprise, during the year? If any, please state what.

2. If by introduction or extension of water service for general use, please state what proportion of the population, by estimation, was supplied with the same at the end of the year.*

3. If by sewerage, state what the aggregate length of sewers, by estimation or otherwise, and about what proportion of the population had drainage connection with them at the end of the year.*

---

*If not known by the person replying, please state where or of whom such information may be obtained.

4. If by new ordinances in abatement of nuisances, or for any sanitary purpose, please send copy of same, also state how far, to your best knowledge, all the sanitary ordinances have been enforced. Copies of town ordinances especially desired.

5. Has your town any legal board of health beside the town council? If so, please give the names of the officers of the same.

6. Please give the names of the health officers of your town.

7. Has gratuitous vaccination been provided in your town during the past year? What proportion of the population was vaccinated, according to your best knowledge?

8. Have undertakers promptly sent in their returns of death? Please give names of any who do not. (See Public Statutes, Chap. 85, Sec. 1.)

Respectfully

GARDNER T. SWARTS,

Sec. State Board of Health.

N. B.—The town or other clerk should charge a remunerative fee for replying to the above circular, and present to the town council or board of health, it being a service required by law.

BRISTOL COUNTY.

BARRINGTON.

1. No particular action for the promotion of public health by the town authorities during the year.

2. About thirty consumers.

3. No public sewers.

5. Board of Health is the Town Council.

6. Arthur C. Peirce, M. D.

7. Gratuitous vaccination was provided for in this town during the past year.

8. Undertakers have quite promptly sent in their returns.

Mark H. Wood, *Town Clerk.*

BRISTOL.

1. No public work has been performed by the authorities. The Health Officer has been very diligent in his labors and visitations, and has accomplished a good work among the citizens generally.

2. About one-third of the population.

3. I have no means of knowing, as all the sewers are private property.

4. All ordinances relative to sanitary purposes have been enforced.

5. Town Council is the Board of Health.

6. George H. Peck.

7. Gratuitous vaccination has been provided. Am unable to say how many.

8. Undertakers in town are very prompt to send in their returns of death.

Herbert F. Bennett, *Town Clerk.*

WARREN.

1. No special work in this direction has been done.

3. No public system; several private sewers. About five per cent. of persons in compact part of town connected therewith.

4. No new ordinances. The sanitary ordinances are much better enforced within two or three years past than formerly.

5. No other but council.

6. Michael B. Conroy.

7. Gratuitous vaccination has been provided. About five per cent.

8. The returns have been made properly.

Charles B. Mason, *Town Clerk.*

KENT COUNTY.

COVENTRY.

1. Many sink drains and privy vaults have been cleaned, and there is a more rigid control of the same.

2. A large proportion of the families in Washington, Anthony, Quidnick, Harris and Arkwright are now supplied by the Pawtuxet Valley Water Co. and the Warwick & Coventry Water Co.

3. None but private drains.

4. No ordinances have been passed.

5. None except Town Council.

6. Albert C. Richmond, M. D.

7. Gratuitous vaccination was not provided for.

8. Undertakers make their returns promptly.

S. W. Griffin, *Town Clerk.*

EAST GREENWICH.

No answer from Town Clerk.

WEST GREENWICH.

1. No work for the promotion of public health by the town authorities during the past year.

5. Has not.

7. Has not.

8. Returns promptly sent, with one or two exceptions.

W. N. Sweet, *Town Clerk.*

WARWICK.

1. No particular work for the promotion of the public health during the year.

2. There has been an extension of the water service of 33 takers, 59 families, 22 street sprinklers, and 1 fire hydrant.

3. No extension of sewers.

TOWN OF WARWICK.

An Ordinance Entitled "Health Ordinance."

Be it Ordained by the Town Council of the Town of Warwick:

Section 1. Every physician who shall attend a case of scarlet fever, diphtheria, small pox, typhoid fever, or any other malignant contagious disease in the town of Warwick, shall notify the health officer of said town within twelve hours after its occurrence, giving the location of each case.

Sec. 2. Every lodging house keeper, hotel keeper, house holder or person having charge of any public or private institution in said town in whose house, hotel or institution any person is sick with the aforesaid diseases or any other malignant contagious disease, unattended by a physician, shall immediately report the same to the health officer.

Sec. 3. No person living in any family wherein any person is afflicted with any of said malignant contagious diseases shall attend school without the permission of the health officer or the physician who shall be attending the case, and no person who shall have been afflicted with any of said malignant contagious diseases shall attend school until the health officer or the attending physician shall certify in writing that such sick person is convalescent and all danger from contagion is passed.

Sec. 4. No public funeral shall be held of any person who shall die of any malignant contagious disease, without the consent in writing of the health officer

Sec. 5. No person shall tear down or deface any placard or flag which shall be put up on or near any dwelling house to give warning of the existence of any contagious disease in said dwelling house.

Sec. 6. Every person who shall violate any of the sections of this ordinance shall be fined not less than $5.00 nor more than $20.00.

Sec. 7. This ordinance shall take effect immediately from and after its passage.

James T. Lockwood, *Town Clerk.*

Apponaug, R. I., Oct. 23, 1893.

5. No.
6. Albert G. Sprague, M. D.
7. By Jas. B. Hanaford, M. D.
8. Some undertakers have been lax, but are now paying more attention to the same.

James T. Lockwood, *Town Clerk.*

NEWPORT COUNTY.

JAMESTOWN.

1. Extension of sewers.
2. Two-thirds.
3. Two miles. One-half population.
4. The ordinances have been very well enforced.

A COPY OF HEALTH ORDINANCES, PASSED BY THE TOWN COUNCIL OF THE TOWN OF JAMESTOWN, R. I., APRIL 24, 1893.

Section 1. When any complaint is made in writing to the health officer or inspector of nuisances, that any hog-sty, privy, drain, sewer, sink-gutter, vault, cellar, building or premises in any part of the town. owned or occupied by any person, from dirt, filth, offal, animal or vegetable matter is calculated to injure health, or by noxious air to annoy the neighborhood, the health officer shall make an inspection of the same. If a nuisance exists he shall notify the owner or occupant to abate the same. If not abated within a reasonable time, to be fixed by the town council, said officer shall abate the same and collect the expense thereof with all costs of such owner or occupant.

SEC. 2. It shall be the duty of said health officer and he is hereby authorized to enter into or upon any part of the premises of any such owner or occupant for the purposes contemplated by any ordinance passed by the town council of said town; and every person who shall oppose, resist or prevent such entry by said inspector, or by any person by him employed, shall, upon conviction, pay as a fine the sum of twenty dollars.

SEC. 3. Whoever shall place, have, or permit to remain, on any lands or premises, occupied by him or under his control, or on any public lands or place, the unburied body of any dead horse, neat-cattle, sheep or hog, which has been dead for twenty-four hours or upwards, and has not been prepared or is not intended, or is not fit for human food, also whoever shall place or cause to be placed the contents of any privy vault or cesspool on any land within the following boundaries: Bounded easterly on Narragansett Bay, northerly by the northerly line of the Bryer farm and Greene farm, and extending due west to Narragansett Bay, westerly on West Narragansett Bay and Sheffield's pond, and southerly by the northerly line of the Cottrell farm, shall be fined twenty dollars.

SEC. 4. No person shall convey or cause to be conveyed any of the contents of any vault, cesspool, or any swill or garbage through any street or highway in said town in any box, cart, wagon or other vehicle which shall not be thoroughly covered and water-tight.

SEC. 5. No person shall place or cause to be placed the contents of any privy vault or cesspool on any land to the injury of the natural water shed of the town's water supply.

Section 3 of an ordinance passed August 22, 1887, was amended to read as follows: All property owners having drain pipes running into the Bay shall extend the same into the Bay to a point at least fifteen (15) feet below mean low water mark, or farther where necessary, so that said pipes shall discharge one foot under water at all times, said pipes also to be properly trapped.

SEC. 4. Any person violating the foregoing section shall be fined $20.00.

A true copy. Attest,

WM. F. CASWELL, *Town Clerk.*

5. No.
6. Abbott Chandler.
7. No.
8. Yes.

WILLIAM F. CASWELL, *Town Clerk.*

LITTLE COMPTON.

1. None.
4. None.

5. No.
6. None.
7 Has not.
8. Fairly well. Undertakers are located in Fall River.

Frederick R. Brownell, *Town Clerk.*

MIDDLETOWN.

1. No work looking to the promotion or protection of the public health has been undertaken in Middletown during the past year, aside from the ordinary measures to preserve a good sanitary condition.

2. The Newport Water Works have laid some additional water-mains in the town, but chiefly with a view of rendering more efficient water service to the people of Newport.

3 Middletown has no system of sewerage.

4 No new ordinances specially designed to improve the sanitary condition were enacted during the year 1893. The following Sanitary Code was adopted January 20, 1890.

Rule 1. Every physician having knowledge of the existence of any case of cholera, yellow fever, typhus fever, typhoid fever, cerebro-spinal-meningitis, diphtheria, small-pox, scarlet fever, measles, intermittent fever, or of any other contagious, infectious or epidemic diseases within the town of Middletown, shall immediately make report thereof in writing to the Health Officer of said town, who shall forthwith take all necessary measures to prevent the spread thereof.

Rule II. Any physician who shall be furnished with a copy of this code, and shall neglect or refuse to comply with the requirements of the first rule hereof, shall be fined not less than two, nor more than ten dollars, for each day of such neglect, after having knowledge of the existence of any of the diseases enumerated therein.

Rule III. No person living in a family where there is a case of either of the diseases enumerated in the first rule of this code, shall attend any school, church, or public meeting, nor shall any teacher of a public school knowingly admit any such person thereto, until the Health Officer shall furnish such person with a certificate that the danger of contagion or infection has passed, and that the dwelling house where such person lives has been properly fumigated.

Rule IV. The certificate mentioned in the preceding rule shall not be furnished until after the elapse of time sufficient, in the judgment of a reputable physician, to show there will be no further cases, and that the peril of contagion has passed.

Rule. V. No person having whooping cough, mumps, or chicken pox, shall attend any school or public meeting until complete recovery.

Rule VI. No undertaker shall conduct, or allow to be conducted, public funeral ceremonies over the body of any person dying of any of the diseases enumerated in the first rule of this code without special permission from the

Health Officer or Town Council, and any undertaker violating the provisions of this rule, shall be fined ten dollars for each offence.

RULE VII. The body of every human being buried within the municipal limits of this town, shall be so buried that the top of the coffin or receptacle containing said body shall be at least three feet below the usual surface of the ground where buried. Whoever buries or inters a body at a less depth without special permission from the Board of Health, shall be fined ten dollars for every such offence.

RULE VIII. The Health officer shall complain of and prosecute to final judgment, all violations of the rules of this code, and shall be entitled to one-half of all the fines recovered by virtue hereof, and the other half he shall pay into the town treasury.

A true copy from the Record. Attest,

ALBERT L. CHASE, *Council Clerk.*

5. It has not.

6. John Peckham.

7. The Town Council employed Dr. C. Frank Barker of Newport, in September and October, to vaccinate inhabitants of Middletown, and meetings were held at the Town Hall for that purpose.

8. They have generally.

ALBERT L. CHASE, *Town Clerk.*

PORTSMOUTH.

1. Nothing in particular.
5. No.
6. William T. Harvey.
7. No.
8. They have.

TIVERTON.

1. None.
2. None.
3. None.
4. No ordinance relating to health.
5. None.
6. Green Tripp.
7. No.
8. Some have.

JOHN T. COOK, *Town Clerk.*

NEWPORT.

1. No unusual public work by city authorities. Water Works Company has nearly, if not wholly, completed extensive addition to reservoir capacity.

3. 34.6 miles. About four-fifths.

4. See report of health officer under circular 132.

5. Newport has a special board of health, the officers are C. F. Barker, M. D., President, F. H. Rankin, M. D., Secretary.

6. Wm. F. Townsend, Health Officer of the Port, Geo. C. Shaw, Executive Officer of Board of Health.

7. Yes. City Physician Henry E Turner.

8. Returns of death have been promptly made.

WILLIAM G. STEVENS, *City Clerk.*

NEW SHOREHAM.

1. Ordinance enacted by the Town Council for such purpose, a copy of which follows.

2. No extension of the water service.

3. None. Private sewers from most all the public houses.

4. Ordinance fairly well enforced.

ORDINANCE OF THE TOWN OF NEW SHOREHAM, ENACTED AND ADOPTED JULY 3, A. D. 1893.

SECTION 1. The enacting style of all ordinances of this town shall be:

It is ordered by the Town Council of the town of New Shoreham as follows:

SEC. 2. All Ordinances hereafter enacted shall be by the town clerk published for three successive weeks, by posting copies thereof in three or more public places in this town, within one week after the passage of the ordinance.

SEC. 3. All fines and penalties for the violation of any of the ordinances of the town council shall be recovered by complaint and warrant, or by other proper legal process, before any court of competent jurisdiction, and when recovered shall enure to the use of the town, except in those cases otherwise provided by the Public Statutes or ordinance.

SEC. 4. No fish intended for manure shall be deposited or composted in any heap upon any land within fifty rods from any public highway or road in any part of said town, unless such fish shall be so covered with earth or otherwise, that no offensive smell shall arise therefrom.

SEC. 5. No person shall place, have, or permit to remain on any lands or premises occupied by him, or under his control, or on any public land or beach, except as is hereinafter designated, in said town, any fish offal, dead bodies of animals, garbage, filth or rubbish of whatsoever name or nature, unless the same shall be removed within twenty-four hours or buried so that no offensive smell shall arise therefrom.

SEC. 6. The within portion of the east beach, so called, bounded as follows: Easterly, by high water mark of Atlantic ocean ; southerly, by a line extending from high water mark to a point three hundred feet easterly from the highway, in line with the northerly end of Trim's Pond or Indian Head Neck Pond ; westerly, by a line two hundred feet easterly from said highway, and northerly by a line fifteen hundred feet from said southerly line and parallel therewith, is hereby designated as a place for depositing filth and garbage, provided that the same be immediately buried by the depositor.

SEC. 7. Whenever complaint in writing shall be made to the health officer by any person aggrieved that any privy vault, drain, sewer, sink, or sink gutter, situated on the premises owned or occupied by any person, from dirt, filth, offal, or animal or vegetable matter, is calculated to injure health, or by reason of noxious air annoy the neighborhood, such health officer shall first ascertain by personal examination that such complaint is well founded, and in all other cases, without such complaint, when from the health officer's own observation or inspection it shall be manifest that any such nuisance exists, it shall be the duty of such health officer to cause the owner or occupant of such premises to be notified in writing of the existence of such nuisance or annoyance, and directed forthwith to abate the same, and if such nuisance or annoyance shall not be abated by such owner or occupant within forty-eight hours after such notice shall be received the said health officer, provided such nuisance or annoyance can be abated for a sum not exceeding ten dollars, shall be authorized to cause the same to be abated or removed at the expense of said owner or occupant.

SEC. 8. Any person who shall wilfully violate any provision contained in either of the above sections shall be fined twenty dollars or imprisoned ten days for every such offence.

Signed and sealed for and in behalf of said council.

EDWARD P. CHAMPLIN, *Council Clerk.*

5. There are no special ordinances regulating the control of infectious and contagious diseases. The Town Council is the Board of Health.
6. Almanza Littlefield.
7. Many vaccinated in 1892; few in 1893.
8. They have.

EDWARD P. CHAMPLIN, *Town Clerk.*

PROVIDENCE COUNTY.

BURRILLVILLE.

1. None.
2. None.
3. None.
4. The following ordinances were passed April 29, 1893.

CHAPTER 7.

RULES OF THE BOARD OF HEALTH FOR THE PREVENTION OF THE SPREAD OF CONTAGIOUS DISEASES.

SECTION 1. Every physician having knowledge of the existence of any case of contagious, infectious, or epidemic disease within the town of Burrillville shall immediately make a report thereof in writing to the health officer of said town, with such particulars as the said health officer may indicate on blanks furnished for the purpose.

Sec. 2. The diseases referred to in the preceding section shall include cholera, yellow fever, typhus fever, typhoid fever, cerebro-spinal-meningitis, diphtheria, smallpox, scarlet fever and such other contagious, infectious, or epidemic diseases as the health officer may from time to time direct.

Sec. 3. Every physician who shall fail to comply with the preceding regulations, shall be fined not less than two dollars, nor more than ten dollars, for each day of such neglect, after having knowledge thereof, as aforesaid.

Sec. 4. No person living in a family where there is a case of smallpox shall attend school until the patient shall have passed the period of dessication (falling off of scabs), and until the house has been properly fumigated.

Sec. 5. No person living in a family where there is a case of scarlet fever shall attend school until five weeks from the beginning of the last case, and until the house has been properly fumigated.

Sec. 6. No person living in a family where there is a case of diphtheria, shall attend school until two weeks after the recovery of the patient, and until the house has been properly fumigated.

Sec. 7. The above rules shall, when deemed necessary by the health officer, be extended to all persons living in the same house where the above diseases exist; and, when they deem it necessary, the health officer may extend the period of isolation specified in the foregoing sections.

Sec. 8. A certificate from the health officer, stating that the required time has elapsed and that fumigation has been properly performed, will be required by the teacher before the persons referred to in the foregoing sections can be admitted to school.

Sec. 9. No person with measles, whooping cough, mumps or chicken pox, shall attend school until after complete recovery.

Sec. 10. Whenever there is a case of scarlet fever or diphtheria in any house, the health officer shall cause to be placed upon such house a card bearing the name of the disease there existing ; and such card shall not be removed except by permission of the health officer.

Sec. 11. The funeral of any person who has died of small pox, diphtheria, scarlet fever, typhus fever or Asiatic cholera, shall be private; and no person having the care or custody of the body of any person who has died of the above diseases, shall do, or knowingly or wilfully permit to be done, any unnecessary act by which the spread of disease from such dead body may be caused or promoted.

Sec. 12. Any person who shall violate any provision of the next preceding rule, shall, upon conviction thereof, be fined not more than twenty dollars or be imprisoned not exceeding ten days, and any undertaker who shall violate any provision of the next preceding rule, upon conviction thereof, shall in addition to the above penalty, be thereupon and thereby removed from the office of undertaker.

5. No.

6. Thomas Quinn.

7. No.

8. No. They send once a month instead of immediately, as required.

JOB S. STEERE, JR., *Town Clerk.*

CRANSTON.

1. None
2. Supplied from Providence.
3. Have no public sewers.
4. No new ordinances. Sanitary ordinances well enforced.
5. Dan O. King, M. D. and John Bigbee, Chief of Police.
6. Dan O. King, M. D.
7. Yes. I do not know. By Dr. King.
8. As far as I am informed they have.

DANIEL D. WATERMAN, *Town Clerk.*

CUMBERLAND.

No answer from Town Clerk.

4. The following ordinance was passed November 11, 1893.

TOWN OF CUMBERLAND.

AN ORDINANCE CONCERNING CONTAGIOUS, INFECTIOUS OR EPIDEMIC DISEASES.

1. Physicians to make report.
2. Diseases referred to.
3. Penalty for not reporting.
4. Persons not to attend school.

5 and 6. Not to attend school, when.
7. Town Council may isolate.
8. Certificate to attend school.

It is ordained by the Town Council of the Town of Cumberland as follows:

SECTION 1. Every physician having knowledge of the existence of any case of contagious, infectious or epidemic disease within the town of Cumberland shall immediately make report thereof in writing to the President of the Town Council of said Town, with such particulars as the said Town Council may indicate, on blanks furnished for that purpose.

SEC. 2. The diseases referred to in the preceding section shall include cholera, yellow fever, typhus fever, typhoid fever, cerebro-spinal meningitis, diphtheria, small-pox, scarlet fever, measles and intermittent fevers, and such other contagious, infectious and epidemic diseases as the Town Council may from time to time direct.

SEC. 3. Any physician who shall fail to comply with the two next preceding sections shall be fined not less than two nor more than ten dollars for each day of such neglect after having knowledge thereof as aforesaid.

SEC. 4. No person living in a family where there is a case of small-pox shall attend school till the patient shall have passed the period of desiccation (falling off of scabs), and until the house has been properly fumigated.

SEC. 5. No person living in a family where there is a case of scarlet fever shall attend school until five weeks from the beginning of the last case and until the house has been properly fumigated.

SEC. 6. No person living in a family where there is a case of diphtheria shall attend school until one week after the recovery of the patient and until the house has been properly fumigated.

SEC. 7. The three next preceding sections shall, when deemed necessary by the Town Council, be extended to all persons living in the same house where the above diseases exist; and when deemed necessary the Town Council may extend the period of isolation specified in same sections.

SEC. 8. A certificate from the Health Officer, stating that the required time has elapsed and that fumigation has been properly performed, will be required by the teacher before the person referred to in the four next preceding sections can be admitted to school.

SEC. 9. No person living in a family where there is a case of measles shall attend school until one week after recovery, and until desquamation, (peeling off of the skin,) shall have ceased.

SEC. 10. No person with whooping-cough, mumps or chicken-pox shall attend school until complete recovery.

SEC. 11. This ordinance shall go into operation and effect immediately.

JOHN F. CLARK, *Council Clerk.*

6. Health Officer George B. Haines, M. D., Valley Falls.

EAST PROVIDENCE.

1. Sewers have been extended quite a distance in Taunton and Warren avenues; the East Providence Fire District have completed their plant and are furnishing water to the residents of that district, which includes Riverside, Rumford and East Providence Center; a person has been appointed to collect swill from all residences in the town, which is a new departure for this town; an ordinance prescribing rules to be observed in case of contagious diseases was passed.

TOWN OF EAST PROVIDENCE.

CHAPTER 31.

AN ORDINANCE PRESCRIBING RULES TO BE OBSERVED IN CASE OF CONTAGIOUS DISEASE.

It is ordained by the Town Council of the Town of East Providence as follows:

SECTION 1. Every physician having knowledge of the existence of any case of contagious, infectious or epidemic disease within the Town of East Providence, shall immediately make report thereof to the Health Officer of said town, with such particulars as said Health Officer may indicate on blanks furnished for that purpose.

SEC. 2. The diseases referred to in the preceding section shall include Cholera, Yellow Fever, Typhus Fever, Typhoid Fever, Cerebro Spinal Meningitis, Diphtheria, Smallpox, Scarlet Fever, Measles, and Intermittent Fever, and such other contagious, infectious and epidemic diseases as the Health Officer may from time to time designate.

Sec. 3. Any physician who shall fail to comply with the provisions of the preceding sections shall be fined not less than two dollars nor more than ten dollars for each day of such neglect, after having knowledge thereof as aforesaid.

Sec. 4. Every physician, householder, or other person having knowledge of the existence of Scarlet Fever, Diphtheria, or other contagious disease in any house or place in said town, shall forthwith give notice of the same to the Health Officer, who shall without delay cause to be placed upon such house or place, a card bearing the name of such disease, which card shall not be removed except by permission of such Health Officer.

Sec. 5. No person living in a family where there is a case of Smallpox shall attend school until the patient shall have passed the period of desiccation (falling off of scabs), nor until the house has been fumigated under the direction and to the satisfaction of the Health Officer, nor without certificate from said Health Officer that said period has elapsed and that said fumigation has been properly performed.

Sec. 6. No person living in a family where there is a case of Scarlet Fever shall attend school until at least five weeks from the beginning of the last case, nor until the house has been properly fumigated in the manner hereinbefore provided, nor without certificate from the Health Officer setting forth said facts.

Sec. 7. No person living in a family where there is a case of Diphtheria shall attend school until at least one week after the recovery of the last patient, nor until said house has been properly fumigated in manner as aforesaid, nor without a satisfactory certificate from said Health Officer.

Sec. 8. The above rules shall, when deemed necessary by the Health Officer, be extended to all persons living in the same house where any of the above diseases exist, and said Health Officer may, in his discretion, extend the period of isolation specified in the preceding sections.

Sec. 9. No person with Measles, Whooping Cough, Mumps, or Chicken Pox, shall attend school until complete recovery certified to by the Health Officer.

Sec. 10. Such certificate will be required by the teacher in every case before the persons referred to in the foregoing sections can be admitted to school.

Sec. 11. The funeral of every person who has died of Smallpox or Diphtheria, Scarlet Fever, Typhus Fever, Asiatic Cholera, or other contagious or infectious disease, shall be private, and the undertaker or person having the care or custody of the body of such deceased, shall cause to be conspicuously affixed to the coffin, casket or other receptacle containing such remains, and in case said coffin, casket or receptacle shall be enclosed in a box, then upon said box, a card bearing the name of the disease whereof such person died, which card shall not be removed; and no person having the care or custody of such body shall do or knowingly or wilfully permit to be done any unnecessary act by which such disease may be spread from such dead body.

Sec. 12. Every person who shall violate any provisions of the preceding section shall, upon conviction thereof, pay a fine of not more than twenty dollars, or be imprisoned not exceeding ten days; and any undertaker who shall violate any provision of said section, upon conviction thereof, shall in addition to the above penalty be thereupon and thereby removed from the office of undertaker.

SEC. 13. Any person who shall violate any of the provisions of this ordinance, the punishment whereof has not been hereinbefore provided for, shall, upon conviction thereof, pay a fine of not more than twenty dollars, or be imprisoned not exceeding ten days.

SEC. 14. All ordinances and parts of ordinances inconsistent herewith are hereby repealed.

A true copy. Attest,

GEORGE F. HUNTER, *Town Clerk.*

TOWN OF EAST PROVIDENCE.

CHAPTER 32.

AN ORDINANCE CONCERNING SWILL AND GARBAGE.

It is ordained by the Town Council of the Town of East Providence as follows:

SECTION 1. The occupant of every tenement house, dwelling house or other building where swill or garbage shall accumulate shall provide a suitable receptacle, properly covered, for such swill or garbage, and no dish water, ashes, house sweepings, bottles, crockery, earthen, glass, tin or iron ware, or other rubbish of any kind shall be placed in any such receptacle, nor shall any swill, garbage or offal be placed in any receptacle for ashes or rubbish or deposited in any yard or vault or in any other place than its proper receptacle.

SEC. 2. All swill and house offal shall be removed from each house within the compact portions thereof covered by any contract or contracts that may be made with such town by any person or persons for such removal at least three times each week during the months of May, June, July, August, September and October, and twice each week during the months of November, December, January, February, March and April, of each and every year, and as much oftener as may be necessary to prevent nuisance and decomposition of such swill and house offal.

SEC. 3. All swill and house offal shall be removed from the town in water-tight, closely covered vehicles, drawn by one or more horses or mules, or in water-tight tubs or casks with covers securely fastened, so as to make the tubs or casks air tight, and all such vehicles, tubs or casks so used, shall be kept clean and well painted on the outside. No vehicle, tub or cask shall be used, or continued in use, for the removal of swill and house offal from the town unless first examined and approved by the Health Officer; and the covers of all vehicles, tubs and casks containing swill or house offal shall be kept tightly closed when they are driven through the streets of the town.

SEC. 4. All vehicles used to remove swill and house offal, or to transport tubs or casks containing swill and house offal shall be duly licensed and numbered, and all such vehicles, tubs and casks shall have upon them such other marks as may be required by the Health Officer.

SEC. 5. Whenever any person shall be designated and appointed to remove swill and house offal from the town, the designation and appointment shall state definitely the houses, buildings or districts from which such person so designated is to remove the swill and house offal, and no person shall remove the swill and house offal from any other house, building or district than that from which he is designated and appointed to remove it.

SEC. 6. All designations and appointments of persons to remove swill and house offal shall be for the current municipal year, and may be revoked at any time by the Town Council.

SEC. 7. Every person violating any of the provisions of this ordinance shall be fined not less than two dollars nor more than twenty dollars for each day's continuance of such violation.

A true copy. Attest,

GEORGE F. HUNTER, *Town Clerk.*

2. The Watchemoket Fire District is supplied with water by the Pawtucket Water Works, and have this year laid mains in several streets in said district; the East Providence Fire District have finished their pumping station at Hunt's Mills and stand-pipe off Pawtucket avenue and are now supplying water to the inhabitants of that district.

3. Sewers have been built in Taunton and Warren avenues, the same being main sewers, and they have been quite generally connected with by the residents on said streets. The exact length of sewers is given by Mr. W. M. Dexter, C. E., as follows:

2661 feet of sewer on Warren avenue.
834 feet of sewer on Sutton street.
2741 feet of sewer on Taunton avenue.
157 feet of sewer on Valley street.
176 feet of sewer on First street.
Total sewers in East Providence 6569 feet.

A very small proportion of the population, as a whole, has any drainage connection with their houses.

4. All sanitary ordinances are strictly enforced by the Health Officer.

6. Mason B. Wood.

7. Gratuitous vaccination has been provided. What proportion has been vaccinated I cannot state, although the physicians have vaccinated a large number of school children.

8. As a rule undertakers' returns come in very satisfactorily.

REPORT OF THE SUPERINTENDENT OF THE EAST PROVIDENCE FIRE DISTRICT, FOR THE YEAR ENDING SEPTEMBER 1, 1893.

Since September 1, 1892, there have been laid the following:

Water Mains.

27,355 feet of 6 inch pipe	5.180 miles
12,791 feet of 8-inch pipe.	2.422 miles
3.173 feet of 10 inch pipe.	0.600 miles
27,427 feet of 12-inch pipe.	5.194 miles
Total	13.396 miles

Hydrants.

There have been set since September 1, 1892 58

Service Pipes.

There have been set since September 1, 1892 157

Meters.

There have been set since September 1, 1892 47

Valuation.

Valuation of real estate in fire district	$3,569,738 00
Valuation of personal estate in fire district	585,847 00
Total	$4,155,585 00
Tax assessed on real estate in fire district	$10,710 76
Tax assessed on personal estate in fire district	1,757 54
Total tax in district	$12,468 30
Valuation of real estate in fire district which has been assessed in the Watchemoket district	$459 940 00
Tax assessed by the Watchemoket district	459 94
Total tax assessed in the district less the amount assessed by the Watchemoket district, ratio, $3 per $1,000	$12,008 36

Respectfully submitted,

J. J. LUTHER, *Superintendent.*

REPORT OF THE EXECUTIVE COMMITTEE.

To the Electors of the East Providence Fire District:

The Executive Committee of the East Providence fire district respectfully reports that since the annual election in 1892 there has been no change in the organization of the committee, Fred. I Chaffee being chairman and Joseph D. Fitts secretary. There have been held during the year twenty-eight meetings of the committee, at which a large amount of business has been transacted.

As was stated in the last annual report contracts have been awarded as follows: To the McNeal Pipe and Foundry Co., of Burlington, N. J., for furnishing the water mains and special castings. The last shipment of mains was delivered here Oct. 12, 1892, and the final payment made April 8, 1893.

To Charles E. Peirce, of East Providence, for preparing the foundations for the standpipe. This work was completed and the final payment made Nov. 5, 1892.

To E. Eugene Eglee, of Needham, Mass., for trenching, back filling, and laying the water mains. This work was in progress at the time of the last annual meeting, and was completed soon after New Year's.

A somewhat larger quantity of rock excavation was found north of the Whitcomb place on Pawtucket avenue than was estimated, which delayed the completion of this work and added to the cost of laying the mains.

The estimate presented by the Committee on Water Supply contemplated the laying of 44,150 lineal feet of mains, or 8.362 miles. There have been laid, as shown by the report of the Superintendent, 70,746 lineal feet, or 13.396 miles, an increase of 26,596 lineal feet, or 5.034 miles, most of this being six inch laterals. The pipe system as laid, on being tested by the turning on of water August 1st, was found to be in a most satisfactory condition, only one break of any account, with a few minor leaks, which have since been repaired.

To the Cunningham Iron Works Co., of South Boston, Mass., for furnishing material and building a standpipe or water tower. This tower is forty feet in diameter, one hundred and twenty five feet in height, and is the only tower of this diameter and height in the country. It will have a conical shaped roof with four dormer windows and be surrounded with a balcony. This will be reached by a ladder and resting places on the southerly side of the tower. The tower is situated on the highest elevation to be found in the district, its foundation being a solid rock or ledge. It will contain when full nearly 1,200 000 gallons of water. The top is 271 5 feet above mean high water mark in Providence River, and it is said by those who have been there to see, that the view from this point is one of magnificence. This elevation will provide something over 250,000 gallons above a point giving from eighty to ninety pounds static pressure in different parts of the district. This amount will supply five fire streams for four hours, each using at the rate of 200 gallons per minute. On the evening of Sept. 7, during a very severe gale from the west or northwest, which lasted for about fifteen minutes, the top of the pipe collapsed for a distance of thirty-five feet down from the top, being then 125 feet high and in an unfinished state. Two days afterwards, upon being filled with water, it resumed its original shape, and it is thought without any material damage being done. The material used in its construction is first-class American rolled steel, whose resistance to tensile strain shall be equal to 60,000 pounds per square inch of section. The first or bottom course is one and nine-thirty-seconds of an inch in thickness. From the top of the first course the thickness of the plates gradually decreases until the top is reached, which is five sixteenths of an inch in thickness.

The first five (5) horizontal laps or seams are triple-riveted with rivets one and one eighth inches in diameter, the rows of rivets two and one-half inches apart, and spaced two and seven-eighths inches on centers.

The roof of the standpipe has not yet been placed in position, but is now on the ground and will be erected in a few days. This, with the angle iron to be placed on the outside of the top plate will strengthen and support the top in a very substantial manner.

The pumping plant at Hunt's Mills consists of the pumping station, boiler, water-wheels and pumps. The pumping station is built of natural face stone, with dark blue stone trimming, nearly all the stone used in its construction being quarried upon the ground. The work on the gate chamber, excavation for the penstock, pumping station and tail race, and the masons' work on the pumping station have been performed by the day, under the charge of Mr. Charles E Peirce.

The carpenters' work on the pumping station was let to Messrs. Straight and Miner, and is practically complete.

The water-wheels and penstock were furnished by the Rodney Hunt Machine Company, of Orange, Mass. The wheels are of different sizes, the smaller being twenty-one inches in diameter and of sixty-six horse power; the larger thirty inches in diameter and one hundred and twenty-five horse power; the larger wheel being designed for furnishing power for electric lighting.

The Knowles Steam Pump Company, of Boston, Mass., has furnished and erected one horizontal tubular boiler, sixty six inches in diameter, of about sixty horse power, one steam and one power pump, each capable of forcing 1,000,000 United States gallons per twenty-four hours through 15,000 lineal feet of twelve-inch mains to the standpipe.

Owing to the incomplete condition of the standpipe, the boiler, water-wheels and pumps have not been tested and accepted.

On July 29, 1893, your committee elected Mr. Joseph J. Luther Superintendent of the East Providence Fire District until the annual meeting, Oct. 2, 1893, at a salary of $1,200 per annum, payable monthly.

On the same date Mr. Daniel E. Peckham was elected pumping engineer until Oct. 2, 1893, at an annual salary of $700 and house rent.

The Central pond has been leased to the East Providence Ice Company, Messrs. Bowen and Cushing, for a term of five years, at one hundred ($100) dollars per annum, for the exclusive privilege of cutting ice, subject to such restrictions as may be required by the executive committee.

On June 20, 1893, a suit was brought against the district in the Court of Common Pleas, by Alfred J. Kent, for trespass on the site of the standpipe and adjoining territory, damages being placed at two thousand ($2,000) dollars. Judgment was obtained by the plaintiff for one hundred ($100) dollars, which was paid by the heirs of Isaac B. Kent without expense to the district.

Mr. Samuel M. Gray, civil and consulting engineer of Providence, R. I., has been employed to make all the plans, estimates, detail drawings, and to inspect all the material furnished and the labor performed, and to his engineering ability and sound judgment much of the credit of its success belongs.

A foot-bridge has been erected across the Ten Mile River at Hunt's Mills by subscription, the firm of James A. Potter & Co. contributing the hard pine lumber for the structure, while other public spirited citizens have added their contributions for this purpose.

Your committee would recommend that an eight-inch main be laid through Waterman avenue to North Broadway, a six-inch main in North Broadway to Central avenue, a six-inch main in Central avenue, that the main in Sutton avenue belonging to the Watchemoket fire district be acquired by purchase, a six-inch main in Woodward avenue, and a six inch main from Central avenue to Woodward avenue; also that the streets running from Waterman avenue southerly have four-inch mains laid as far as the revenue to be obtained from the water rates will warrant its being done. A six-inch main should be laid at Bullock's Point as soon as a right of way can be obtained. This matter should receive early attention so that the work can be accomplished before the next season. The revenue to be obtained from this section will amount to quite a sum, as seventy-five water takers have been guaranteed on this line of mains.

To meet the expenses of the district for the coming year it seems necessary that a tax of three mills on each dollar of valuation be assessed. The amount received from this source, with the annual water rates and other assets, will a little more than meet the present liabilities of the district with the running expenses for a year to come, without making any provision for an extension of the mains or service pipes.

Good progress has been made in putting in the service pipes, as is shown in the report of the superintendent Much still remains to be done in this direction before all of our people who are situated on the line of mains can enjoy a full and unlimited supply of one of the necessities of life, pure water.

Your committee would also recommend that the officers of the district be allowed the following amounts for their services the past year: Moderator, $5.00 for each meeting of the district; clerk, $5.00 for each meeting of said district; treasurer, $250; assessors, $3.00 per day each, while in actual service; collector, $250; superintendent, $1,200 per annum, payable monthly.

Your committee feel that the whole water works system has been built in a most thorough and complete manner, and of sufficient capacity to furnish 1,000,000 gallons daily, or more than double the quantity now being used by both districts.

Respectfully submitted,

FRED I. CHAFEE,
JOSEPH D. FITTS,
J. J. LUTHER,
TIMOTHY A. LEONARD,
MARTIN L. READ,
DORRAN B. COXE,
GEO. N. CAMPBELL,
BAYLIES T. BOURNE,
HORACE H. DODGE,

Executive Committee.

REPORT OF THE SUPERINTENDENT OF THE WATCHEMOKET FIRE DISTRICT, FOR THE YEAR ENDING JULY 1, 1893.

By a vote of the Administrative Board I have laid six hundred and forty feet (640) of 6-inch pipe on Summit street, there is now a 6-inch main the entire length of the graded portion of that street. I have also had an extra hydrant placed on this street. The services on this street, which were formerly attached to a small private pipe, have all been connected with the main.

There have been two leaks in mains the past year, one on Warren avenue and one on North Broadway, there was also a leak in the gate at Warren avenue and Potter street, also a hydrant on Taunton avenue.

The past winter being of unusual severity, considerable trouble was experienced with hydrants, street gates, and meters.

As per Report of the Water Commissioners of the Watchemoket Fire District, August 1, 1881, at page 7, the District now owns of

12-inch pipe	17,248 feet
8-inch pipe	15,108 feet
6-inch pipe	12,525 feet

laid under the original contract.

There has been since laid by the City of Pawtucket and the Watchemoket Fire District of

8 inch pipe	541 feet
6-inch pipe	9,569 feet
4-inch pipe	8,397 feet

The total amount of 12, 8, 6, and 4 inch pipe now owned by the Watchemoket Fire District is about 12 miles.

Respectfully submitted,

Orland Freeborn, *Superintendent.*

George F. Hunter, *Town Clerk.*

FOSTER.

1. None.
5. No.
6. Henry Arnold, M. D., Health Officer.
8. Fairly, but generally without the physician's certificate.

Emory D. Lyon, *Town Clerk.*

GLOCESTER.

6. Health Officer is George A. Harris, M. D.
8. Undertakers have sent in their returns promptly.

C. W. Farnum, *Town Clerk.*

JOHNSTON.

2. About three-fourths.
4. Well enforced.
6. John W. Waters.
8. All undertakers have not been so prompt as should be.

Joseph Gough, *Town Clerk.*

LINCOLN.

No answer from Town Clerk.

The following amendment of health ordinance was passed :

CHAPTER 35, IN AMENDMENT OF CHAPTER 18.

[Passed November 24, 1893.]

An Ordinance in Amendment of and in Addition to Chapter XVIII of the Ordinances of the Town of Lincoln, Entitled "Public Health."

It is ordained by the Town Council of the Town of Lincoln as follows:

Section 1. The health officer of the town of Lincoln, upon notification from any person, shall, and in his discretion without notification as aforesaid, may, during the prevalence of smallpox, scarlet fever, typhoid fever, or other contagious or epidemic infectious disease in said town, make proper examination of the person reported or suspected to be sick of any contagious or epidemic infectious disease, and if upon examination he shall be satisfied that such person is sick of any contagious or epidemic infectious disease, he shall in all cases in which no provision is otherwise made by law, immediately cause a placard, with the name of said contagious or infectious disease, in letters not less than six inches in length printed thereon, to be placed so as to be easily read, at or near the front door or principal entrance of the building in which such person is sick as aforesaid; the same to be kept so placed so long as, in the opinion of such health officer, there shall be danger of infection from said building; and upon consultation and with the advice and consent of some member of the town council, said health officer may set a proper guard to prevent the spreading of the contagious or infectious disease, and shall give such direction as he may deem proper concerning the ingress and egress of persons to and from said building; and any member of the town council in his discretion, if in his opinion immediate action is required, upon receiving notification from any physician that any person is sick of any contagious or epidemic infectious disease, may set such guard as aforesaid without consultation with said health officer, and give such direction as he may deem proper, in which case such member of the town council shall forthwith notify said health officer, who shall, upon receiving such notice, proceed as herein provided.

Sec. 2. Every physician attending any person having such contagious or epidemic infectious disease, shall forthwith give information to some member of the town council or to the health officer.

Sec. 3. Every person who shall deface or remove any such placard without permission of said health officer, or who shall wilfully disregard or violate any rule, regulation, direction or order of said health officer, concerning the ingress or egress of persons to or from said building, and every physician violating section two of this ordinance, shall be fined not exceeding twenty dollars, or be imprisoned not more than ten days.

Sec. 4. Said health officer shall report his doings under the first section of this ordinance to the town council as soon as may be, who shall thereupon take such action and make such orders thereon as they may deem desirable.

Sec. 5. This ordinance shall take effect on and after its passage.

A true copy—Attest:

C. Fred Crawford, *Council Clerk.*

Lincoln, R. I., Nov. 24th, A. D. 1893.

NORTH PROVIDENCE.

1. Nothing been done.

2. Water pipes were extended at Lymansville. Do not know how many were supplied.

3. Has none.

5. Has none.

6. Sanford E. Kinnecom, Health Officer.

7. Has not

8. The undertakers have not been very particular about the time they send their returns.

THOMAS H. ANGELL, *Town Clerk.*

SCITUATE.

1. No.

2. No.

3. None.

4 None.

5. No.

6 Samuel B. Smith, M. D.

7. None.

8. I think they make prompt returns

DANIEL H. REMINGTON, *Town Clerk.*

SMITHFIELD

1. None.

5. None.

6. Jenckes Smith.

7. No.

8. Yes.

OSCAR A. TOBEY, *Town Clerk.*

NORTH SMITHFIELD.

1. None.

2. None. The following ordinances were passed in 1888:

TOWN OF NORTH SMITHFIELD.

AN ORDINANCE IN RELATION TO CONTAGIOUS OR INFECTIOUS DISEASES.

It is ordained by the Town Council of the town of North Smithfield as follows:

SECTION 1. Every physician having knowledge of the existence of any contagious disease within the town of North Smithfield shall immediately make a report thereof to the Health Officer of said town.

SEC. 2. The diseases referred to in the preceding section shall include among others, smallpox, diphtheria, typhoid fever, typhus fever, scarlet fever or scarlatina.

SEC. 3. Whenever there is a case of scarlet fever, diphtheria, or any contagious or infectious disease in any house in the town, the health officer shall cause to be placed upon such house a card bearing the name of the disease therein existing, and any person who shall remove said card except by permission of the health officer shall upon conviction thereof pay a fine of not more than twenty dollars.

SEC. 4. No person shall retain, expose or allow to be retained or exposed the body of any person who has died of smallpox, diphtheria, scarlet fever, typhus fever, or Asiatic cholera, to the peril or prejudice of the life or health of any person.

SEC. 5. Any person who shall violate any provision of the foregoing ordinance shall upon conviction thereof pay a fine of not more than twenty dollars, and any undertaker who shall violate any provision of the foregoing ordinance, upon conviction thereof, shall in addition to the above penalty be thereupon and thereby removed from the office of undertaker.

SEC. 6. This ordinance shall take effect from and after its passage.

Attest :

BYRON A. ANDREWS, *Council Clerk.*

AN ORDINANCE TO PROHIBIT PUBLIC FUNERALS OF PERSONS WHO DIED OF ANY CONTAGIOUS DISEASE.

It is ordained by the Town Council of the town of North Smithfield as follows :

SECTION 1. No undertaker or other person in this town who shall have charge of or who shall conduct any funeral of any deceased person in this town who died of smallpox, diphtheria, scarlet fever, or any other contagious or infectious distemper, shall allow or permit such funeral to be attended by any person or persons, except the immediate members of the family of such deceased person and who live in the same house where such deceased person died, and the undertaker in charge of the funeral and his assistants.

Any violation of the foregoing by any person in this town shall be deemed a misdemeanor, and the person so offending, upon conviction thereof, shall pay a penalty of twenty dollars for each offence, to be recovered to and for the use of this town, by complaint and warrant before the district court of the twelfth judicial district of this state.

SEC. 2. This ordinance shall take effect from and after its passage.

Attest :

BYRON A. ANDREWS, *Council Clerk.*

The foregoing ordinances were passed by the town council of the town of North Smithfield, May 1, 1888.

Attest :

BYRON A. ANDREWS, *Council Clerk.*

6. John B. Green, health officer.
7. Yes. Report of number not yet received.
8. No undertaker in town.

Byron A. Andrews, *Town Clerk.*

PAWTUCKET.

FROM THE REPORT OF THE SUPERINTENDENT OF WATER WORKS THE FOLLOWING EXTRACTS ARE MADE.

The public water service has been largely extended, as is seen by the following extracts from the Fourteenth Annual Report of the Water Commissioners and Superintendent of Water Works:

During the past year there has been the largest extension of street mains that there ever has been in any one year, except when extensions have been made into other towns, or special appropriations for extra extensions.

In another part of my report it will be seen that it amounts to over four and one-quarter miles in Pawtucket alone.

We are now using for all services what is known as the New England Water Pipe Co.'s lead-lined iron pipe. We have had an experience with it for the past two years, and believe it to be safe and responsible. It practically makes a lead service, and at one-half the cost of lead pipe, which under our pressure, causes expansion and leakage.

During the year the works have been extended by mains laid in the different streets to the extent of 127,719 feet. The total of mains to date is 118½ miles. Hydrants have been set to the number of 20, which added to the 847 of last year's report makes a total of 867 on the works.

APPLICATIONS.

Applications for water have been made as follows:

In Pawtucket Division	197
In Central Falls Division	70
In Lonsdale and Valley Falls Division	59
In Ashton Division	11
In East Providence Division	34
	371

SERVICES.

292	services have been made in Pawtucket Division.
81	“ “ “ “ Central Falls Division.
66	“ “ “ “ Lonsdale and Valley Falls Division.
36	“ “ “ “ East Providence Division.
11	“ “ “ “ Ashton Division.
487	
91	services discontinued.
396	
5,990	services as per last year's report.
6,386	number of services in use up to date.

METERS.

348 services have been supplied with meters as follows:

222 in Pawtucket Division.
68 in Central Falls Division.
31 in Lonsdale and Valley Falls Division.
24 in East Providence Division.
4 in Ashton Division.
——
349
4,080 as per last year's report.
——
4,429
32 discontinued and changed to faucet accounts
——
4,397 number of metered services to date.

NUMBERS ONE, TWO AND THREE STATIONS.

Total number of gallons pumped	1,732,825,840
Cost of raising 1,000,000 gallons into reservoir	$11 64
Cost of raising 1,000,000 gallons one foot high	0.042
Average daily consumption of water in United States gallons, (365 days.)	4,747,468

TABLE SHOWING AMOUNT OF RAIN AND MELTED SNOW FOR THE YEAR ENDING NOVEMBER 30, 1893.

December	1.28
January	2.77
February	5.950
March	5.140
April	3.970
May	5.900
June	2.390
July	0.960
August	4.06
September	2.540
October	3.470
November	2.520

Total rain and melted snow, 40.95.

Total depth of snow, 70.62.

In conclusion I would say that the works are in a condition that any taxpayer or citizen, if he will take the trouble to inspect the same, will have just cause to be proud.

Personally, and with pardonable pride, I may be allowed to say that I have taken great interest in the works, and have labored for the past fifteen years to make them what they are, by and with the aid of the Honorable Board of Water Commissioners and the town and city governments, and results have been produced that I am proud of.

I challenge any person to show works anywhere in the United States, age, cost of works, and height of pumping considered, that has done what we have done, in economy of construction, in pumping, or benefits received in our fire duty, or rates for water, or revenue received to pay the running expenses and interest on the bonds, besides what has been put into the sinking fund.

I may be allowed to say we have a reputation outside our city that will bear me out in my assertion, and it is gratification enough for me to be able to make this statement and be sure it can be substantiated.

I have given fifteen years of the best of my life to accomplish this result, and I am amply repaid in my salary and the reputation of the works.

The works, like all others, will never be completed, as the constant demand for extensions of mains and pumping engines and storage reservoirs will appear as they are wanted, but practically our works are in a condition so that for the next ten years, unless some extraordinary event occurs, nothing but extension of mains will be required.

EDWIN DARLING, *Superintendent.*

EXTRACTS FROM THE REPORT OF THE SEWER COMMISSIONERS.

FILTER FIELDS.

We have done some work on the new filter fields, and as soon as the receiving tank is covered with a roof they will be in a condition to care for all the sewage that can reach them this winter. With a very small outlay in the spring the fields can be put in condition to care for all the sewage from the Moshassuck river districts for quite a number of years.

While on this subject, although it may more properly come from the health department, we desire to call your attention to the condition of the swamp just below our filter fields, where all of the washings from the abattoirs on Smithfield avenue are allowed to settle and decay. The condition of the swamp is getting worse every year. This last summer the stench arising from the swamp was sickening. The owners of the abattoirs should be required to care for this waste, either by evaporation or treatment with chemicals and filtration.

RECOMMENDATIONS.

We recommend that the intercepting sewer be laid at once across the Blackstone river at Blackstone avenue, thence in Blackstone avenue to Middle street to Carnation street, also a short piece in Front street from Blackstone avenueto Exchange street. This is in accordance with our original plans. At present, by the intercepting sewer between North Main street and Carnation street, the sewage from all of Pleasant View is now discharged at the foot of Carnation street, where it is now causing something of a nuisance.

The sewage from the Central avenue district, will, until the intercepting sewer is built, discharge at Central avenue bridge. The sewage from Broadway and Allen avenue discharging at the foot of Blackstone avenue, and the sewage from the Brook street, Spring street and Grove street district in discharging at the Exchange street bridge. The discharging of sewage into the Blackstone river should be stopped as soon as possible. The building of the sewer as now recommended will prevent the pollution of the Blackstone on the part of the city of Pawtucket, and carry all sewage of the Blackstone river districts to tide water, and to one point where it may be pumped to the proposed filter bed.

We recommend that a sufficient sum of money be appropriated and authority be given to purchase land sufficient for permanent sewage disposal, by intermittent downward filtration. We could call your attention to our previous reports, and to the report of Messrs. Samuel M. Gray and Charles A. Allen, in appendix D of our report of 1892, in which they say: "We are of the opinion that the sewage from the city can be treated by filtration or by filtration and irrigation combined, on the land before described, at less cost than by connecting with the sewers of Providence (except in the case of the Moshassuck river valley district), paying therefor the cost of the necessary increase in the size of the sewers, and for final treatment of the sewage at Fields Point."

"We therefore recommend that Pawtucket adopt intermittent filtration. We suggest, however, that a sufficient quantity of land be secured to permit practicing irrigation to some extent, during the summer months, should it be found desirable to do so."

It was our intention to urge this action last summer, but owing to the stringency of the money market we did not at that time deem it advisable. We do not think it advisable to wait another year.

We recommend an appropriation, for maintenance and care of sewers, of ten thousand (10,000) dollars. In 1894 there will be 583 catch basins (an excess over 1893 of 147), 75 flush tanks, and the Moshassuck filter field to be cared for and paid for from this appropriation.

VENTILATION MAN HOLES.

The question of the best system of ventilation for sewers has received as much attention as any of the many perplexing questions connected with the appurtenances of a sewerage system. Commencing a number of years before the system was started in Pawtucket, and continuing to the present time, experiments in ventilation, by the use of fans, furnace fires, high ventilating shafts and other systems of forced draft, have been tried. Owing no doubt to the porosity of the soil, together with the inability of house traps to stand the air pressure, they have been, as far as practical results are concerned, failures. Col. Waring has advocated ventilating the sewers through the house drains to the roofs of the houses. This undoubtedly is the ideal ventilation were there not so many ifs to be considered.

Nothing has yet been found more satisfactory than our present method of ventilation, i. e., by man holes and lamp holes, built from the crown of the sewer to the surface of the street, and depending upon the difference in temperature between the air in the sewer and the outer or open air for a circulation.

There have been built during the year 155 man holes, making a total of 707 man holes and 205 lamp holes.

SCHEDULE OF LENGTH OF SEWERS IN THE BLACKSTONE RIVER WATER SHED, CONSTRUCTED DURING YEAR 1893.

Materials	Brick.							Salt Glazed Sewer Pipe.					Length by Streets.	Appurtenances.			
Form of Sewer	Circular.							Circular.						M. H.	C. B.	G. I.	F. T.
Diameter of Sewers in inches	87 Tunnel.	87	64	60	54	28	24	18	15	12	10	8					
Totals by Size of Sewers	244.00	410.60	50.00	815.00	459.40	46.00	490.25	3557.81	2932.32	1320.65	291.15	7395.84	18013.02	120	109	7	13

SCHEDULE OF LENGTH OF SEWERS IN THE MOSHASSUCK RIVER WATER SHED, CONSTRUCTED DURING YEAR 1893.

Materials	Brick.							Salt Glazed Sewer Pipe.			Length by Streets.	Appurtenances.		
Form of Sewer	Circular.							Circular.				M. H.	C. B.	G. I.
Diameter of Sewer in inches	68	56	52	48	42	40	22	18	15	12				
Totals by Size of Sewers	520.00	1001.20	938.00	479.50	92.00	220.00	275.90	261.88	1016.97	735.65	5541.10	35	38	2

It will be seen by the "Schedule of lengths of sewers in the Moshassuck river water shed, constructed during the year 1893," there have been constructed 5,541 lineal feet, 1.0496 miles of sewers, which, added to the length previously reported, 2.6967 miles, makes a total length of sewers in the Moshassuck river water shed of 3.7463 miles.

There have been constructed in the Blackstone river water shed, during the year 1893, as per within schedule, 18.013 lineal feet=3.4115 miles of sewers, constructed previous to 1893, 18.3341 miles of sewers, a total in the Blackstone river water shed of 21.7456 miles of sewers.

The total length of sewers constructed in the city of Pawtucket to December 1, 1893, is 25.4919 miles, of which 5.2029 miles are of brick, the remainder, excepting 397 feet of iron pipe, 20.2890 miles being of salt glazed sewer pipe.

All of which is respectfully submitted.

ISAAC SHOVE,	*Board of*
FREDERIC W. EASTON,	*Sewer*
WILLIAM P. MORONEY,	*Commissioners.*

A. R. SWEET, *Engineer and Superintendent.*

PROVIDENCE CITY.

1. An unusual amount of work has been contemplated and executed by all the departments of the city throughout the year.

2. The account of the extension of the water service is given in the report of the department of public works appended.

3. The extension of the sewerage system has been actively carried on as will be seen by the extracts from the City Engineer.

4. The removal of privy vaults in the compact portion of the city has been continued, and a plumbing law has been adopted.

5. The Board of Aldermen is the Board of Health.

6 Health Officers are, Charles V. Chapin, M. D., Superintendent of Health; Charles H. Leonard, M. D., Vaccinating Physician; Eugene P. King, M. D., Medical Inspector; John S. Rogers, Sanitary Inspector; John S. Adamson, Signal Officer at Quarantine; James T. P. Bucklin, Inspector of Provisions.

7. Gratuitous vaccination was continued throughout the year as usual. A large number of adults were vaccinated, and all children who desired to enter the public schools, as provided by the State laws.

8. All undertakers send in their returns of death promptly, as permits for burial or removal are required under penalty of fine and loss of license to continue business.

SUMMARY OF STATEMENTS MADE IN THE REPORTS OF THE CITY ENGINEER AND COMMISSIONER OF PUBLIC WORKS.

Pollution of the Pawtuxet River.

Continued monthly inspections of the various causes of pollution of the Pawtuxet River are made, and an increased desire on the part of those polluting the stream to assist the departments has been shown.

Water Works, Hydrants, Pipes, etc.

Eighty-six hydrants have been set during the year.

The total number of hydrants to December 31, 1893, is fifteen hundred and twenty-five, including seventy-four in the town of Johnston. This number does not include fifty-two post hydrants which are set in the town of Cranston.

Following is a statement of the length of each size of water pipes in the ground, December 31, 1893, considered as mains:

SIZES OF PIPES.	Length in Feet.	Length in Miles.
36 inch	10.084	1.9098
30 "	59,912.70	11.3471
24 "	43,595.20	8.2567
20 "	9,626.59	1.8232
16 "	33,067.60	6.2628
12 "	77,754.09	14.7262
10 "	14,656.54	2.7759
8 "	225.271.21	42.6650
6 "	968,873.46	183.4988
Totals	1,442,841.39	273.2654

Included in the above table are the following approximate lengths of pipes which are laid in adjoining towns:

CRANSTON.		JOHNSTON.		NORTH PROVIDENCE.		PAWTUCKET.		WARWICK.	
Sizes of Pipes.	Length in Miles.	Sizes of Pipes.	Length in Miles.	Sizes of Pipes.	Length in Miles.	Sizes of Pipes.	Length in Miles.	Sizes of Pipes.	Length in Miles.
36 inch.	1.9098	30 inch.	0.0587	30 inch.	0.0037	12 inch.	0.0003	6 inch.	0.3398
30 "	4.5134	12 "	0.0451	24 "	0.5386				
24 "	0.1307	8 "	6.0390	12 "	0.0154				
12 "	1.8791	6 "	8.3809	8 "	0.5011				
8 "	4.3347			6 "	0.3998				
6 "	11.4670								

Total amount of pipes laid in adjoining towns is 40.5571 miles.

The approximate cost of laying water pipes, with appurtenances, except hydrants, and including iron at $30 per long ton, is:

For 4 inch	$0.498	per foot.
" 6 "	0.725	" "
" 8 "	0.973	" "
" 10 "	1.214	" "
" 12 "	1.593	" "
" 16 "	2.403	" "
" 20 "	3.359	" "
" 24 "	4.454	" "
" 30 "	6.348	" "
" 36 "	8.540	" "

The cost of the water works construction from November 8, 1869, to January 1, 1894, is $5,943,492.94, upon which there has been a revenue for water sold of $5,974,193.05.

The monthly and annual and the average daily and monthly consumption of water, including waste and leakage, during the year is shown in the following table :

MONTHS.	Consumption per month.	Average monthly consumption.	Average daily consumption per month.	Average daily consumption for the year.
January	288,474,010		9,305,613	
February	247,730,716		8,847,526	
March	270,866,320		8,737,623	
April	242,209,871		8,073,662	
May	266,091,530		8,583,598	
June	297,474,246		9,915,808	
July	334,131,444		10,778,434	
August	325,562,877		10,502,028	
September	284,485,571		9,482,852	
October	272,488,756		8,789,960	
November	235,534,425		7,851,148	
December	266,875,678		8,608,893	
Total	3,331,925,444			
Averages		277,660,454		9,128,563

The amount of water consumed, shown in the above table, includes the supplying of about thirty-three and four-tenths miles of distribution pipes, located in adjoining towns, as well as supplying the greater part of the State Institutions at Cranston. A considerable quantity of water has been used during the year for irrigating at the Dexter Asylum and upon the improved sewerage system. Also, in the colder months, a large quantity of water has been run from the distribution pipes through small blow-offs at different points where the pipes are not sufficiently protected in crossing bridges and elsewhere, for increasing the circulation in order to prevent the water from freezing in the pipes.

The quantity of water supplied to the city and suburbs by the Providence water works has been during the past year greater than ever before and the annual increase has been rapid. The average daily consumption, as shown above, was 9,128,563 gallons. From the seventh of last July to the fourth of last August (twenty-nine days) the average consumption of water was 11,385,000 gallons per twenty-four hours, and during six consecutive days of this time it was 13,124,000 gallons per twenty-four hours.

The following table shows the average daily consumption of water during the last seventeen years:

YEAR.	Average daily consumption in gallons.	YEAR.	Average daily consumption in gallons.
1877	2,492,032	1885	4,730,556
1878	2,701,404	1886	4,822,125
1879	3,110,279	1887	4,939,982
1880	3,547,264	1888	5,518,691
1881	3,716,937	1889	5,786,961
1882	3,665,427	1890	6,743,047
1883	4,143,798	1891	7,272,070
1884	4,083,373	1892	8,058,414
		1893	9,128,563

Early in March, a short time after the approval of the city council resolution, No. 102, relative to the purchase of mechanical gravity filters for purifying the water of the Pawtuxet river, a series of experiments was commenced at the Pettaconset pumping station. The experiments have included both natural and mechanical filtration, and are still in progress. They will probably be completed about the last of the present month of January. The work has been pushed as rapidly as possible under the circumstances, but so little reliable data was obtainable in regard to mechanical filtration, and especially in regard to the use of alum as a coagulant, it was deemed advisable to make a thorough investigation of the subject, and to continue the experiments through several of the cold months in order to ascertain if the same results could be obtained with the water under different conditions and at a low temperature, as was obtained during the warm months of the year.

Fruit Hill reservoir was not in service at the beginning of the year, it having been found that water at several points had made its way through the new lining to fissures in the ledge through which it could freely escape. From January to the end of May, water in the reservoir was held at such elevations as would allow of the washing of sharp sand into the channels, tending to close them and also to furnish a clue to trace the course of the water through the new lining, when the course was opened for repuddling. It was found that by the aid of the sand deposited on the way we could trace the passage of the water to a fissure in the ledge to the depth of many feet, in some cases, and always beyond the limit of the former work which usually had a thickness of about eight feet at the bottom of the slope. When the channels had been opened to the rock, water was pumped in and the escape through the fissures of the ledge carefully noted. When all that was practicable had been learned about the fissures they were closed with grout, mortar and concrete thoroughly applied, the puddling was carefully restored, and the broken stone and paving replaced.

The vertical concrete wall ten feet deep all around the reservoir at the foot of the slope had given us much trouble, and it appeared, upon examination, that an overhanging shoulder in the wall about four feet below the top, where the thickness was reduced, had a space under it and above the puddle. As the puddle was originally thoroughly rammed against the shoulder it seems that a settlement had taken place there. To fill this space grout was poured in under pressure through pipes, and before fixing the distance apart of holes for this purpose observations were made upon the horizontal distance through which the grout would travel under the shoulder of the wall. It was found that we might expect the grout to flow more than a hundred feet from the point of entrance at places where observations were made. In order to be on the safe side holes were made all around the reservoir at intervals of about fifty feet or a little more. A two-inch iron pipe having an elbow at the bottom turned towards the wall was set in a hole and thoroughly tamped in with puddle. To the top of the pipe was attached hose, leading to a large tub at the top of the embankment, and the grout was passed through this under a pressure of about twenty-eight feet of head upon the elbow opening into the space under the shoulder of the concrete wall. The grout was made of one part of natural hydraulic cement, one part of dry clay, powdered, and one one-half parts of water.

SEWERS.

The following is a statement of the total lengths of sewers constructed to January 1, 1894:

	Constructed previous to 1893.	Constructed in 1893.	Totals.
Length in feet	493,796.28	106,774.45	600,570.73
" " miles.	93.522	20.222	113.744

From the preceding tables it will be seen that 20.222 miles of regular sewers have been built during the past year, of which 17.734 miles were of pipe, and 2.488 miles were of brick, making a total to date of 85.046 miles of pipe sewer, and 28.697 miles of brick sewer.

3.843 miles of sewers have been built under the appropriation for improved sewerage which, added to the 20.222 miles of regular sewer, makes a total of 24.065 miles of sewer built the past year, and a total of 129.012 miles of sewer built to date.

Three hundred and seventy-three catch basins, one hundred and forty-four extra inlets, and nine hundred and sixty-two manholes have been built and connected with the sewerage system the past year.

The total number of catch basins in use January 1, 1894, is three thousand two hundred and seventy-three.

The total number of manholes in the present system is five thousand four hundred and eighty-five.

The number of house connections made in 1893 was one thousand nine hundred and sixty-two, and the number of extensions to drains already laid was five hundred and eighty-four.

The total number of house connections made with the sewers January 1, 1894, is nine thousand four hundred and forty-one.

PARKS AND PUBLIC BUILDINGS.

The area, in square feet and in acres, for each tract of land now devoted to park purposes in the city is given below, and also the area of the addition to Roger Williams Park and the proposed addition to Blackstone Park.

	AREA IN SQUARE FEET.	ACRES.
Roger Williams square	40,000	0.918
Tockwotton Park	155,765	3.576
Washington square	39,052	0.896
Park at junction of Governor and Williams streets	1,752	0.040
Abbott Fountain lot, India street	1,788	0.041
Triangle at corner of Stampers and Hewes streets	353	0.008
Blackstone Park	204,560	4.696
Prospect terrace	12,033	0.276
Triangle at junction of Charles and Back streets	2,350	0.054
Hopkins Park	48,590	1.115
Franklin square at corner of Atwell's avenue and Bradford street.	22,914	0.526
Abbott Park on Broad street near Chestnut street	7,800	0.179
Triangle at junction Hospital and Eddy streets	1,120	0.026
Triangle at junction Bassett, Elm and Hoppin streets.	1,370	0.031
Hayward Park	115,349	2.671
Columbus Park	11,082	0.254
Rogers Williams Park	4,554,705	104.562
Arnold square (deeded to but not accepted by the city)	38,950	0.894
Davis Park	1,481,941	34.021
Dexter Training Ground (controlled by commissioners)	395,410	9.077
Total	7,136,884	163.227
Blackstone Park proposed addition. Assumed area	1,300,000	29.844
Roger Williams Park addition. Assumed area	13,030,000	299.128
Total with the additions	21,466,884	492.812

SCITUATE.

1. No work for the promotion of public health has been contemplated.
2. No new sanitary ordinances.
5. Town council is board of health.
6. Samuel B. Smith, M. D., health officer.
7. Gratuitous vaccination has not been provided.
8. Undertakers have made prompt returns.

DANIEL H. REMINGTON, *Town Clerk.*

SMITHFIELD.

6. Jenckes Smith, health officer.

Oscar A. Tobey, *Town Clerk.*

WOONSOCKET.

1. 20,000. Population 25,000.
5. Jas. C. Molten, Dr. J. C. Maranda, Dr. Ara M. Paine.
6. Dr. J. C. Maranda.
7. No.
8. Yes.

William C. Mason, *City Clerk.*

WASHINGTON COUNTY.

CHARLESTOWN.

1. Nothing new for the promotion of public health contemplated in this town by the town authorities.
2. No public water service.
3. No public sewers.
4. No new ordinance for sanitary purpose. All the sanitary ordinances have been enforced.
5. The town council is the board of health.
6. H. L. Stillman, M. D., health officer.
7. Gratuitous vaccination has not been provided.
8. There are no undertakers in this town. Those coming from other towns do not promptly send in returns.

George C. Cross, *Town Clerk.*

EXETER.

1. No new work for the promotion of public health.
2. No water service extensions.
3. None.
4. No ordinances regulating the control of contagious diseases.
5. No.
6. Town council is the board of health; no special health officer.
7. No public vaccination has been provided.
8. No.

John H. Edwards, *Town Clerk.*

HOPKINTON.

1. Has not.
5. Has not.
6. James M. Lewis, M. D., is the health officer.
7. Undertakers have not been prompt in making returns.

EDWIN R. ALLEN, *Town Clerk.*

DISTRICT NARRAGANSETT.

1. No
2. Thomas G. Hazard, Jr., district engineer.
3. Sanitary ordinances have been enforced.
5. No.
6. Louis A. Champlin, health officer.
7. No.
8. No.

WILLIAM H. CASWELL, *District Clerk*

NORTH KINGSTOWN.

1. Ordered the health officer to investigate and report if necessary.
2. No water service.
3. No public sewerage.
4. No new ordinances have been enacted since 1886.
6. Stephen E. Reynolds is the health officer of the town.
7. No gratuitous vaccination provided.
8. Undertakers have been quite tardy in making returns of deaths.

CHARLES T. CROMBE, *Town Clerk.*

RICHMOND.

4. The town council is arranging a town ordinance in relation to nuisances, etc.
5. None.
6. The health officer is Nelson K. Church.
7. Yes. Only sixty-seven vaccinated.
8. About the same as former years.

H. P. CLARKE, *Town Clerk.*

SOUTH KINGSTOWN.

6. Frederick C. Gould, health officer.
7. Undertakers have been tardy in making their returns.

HOWARD B. PERRY, *Town Clerk.*

WESTERLY.

1. None.
2. Westerly Water Works.
3. None.
4. Town ordinances same as last year.
5. No.
6. Ethan Wilcox, health officer.
7. No vaccination has been furnished during last year. No application.
8. Yes.

WILLIAM HOXSEY, *Town Clerk.*

REPORTS OF

HEALTH OFFICERS.

1893.

CIRCULAR TO HEALTH OFFICERS.

Following the practice of previous years and in order to ascertain what degree of interest was taken in the work of sanitary inspection; what knowledge of the prevalence of contagious, infectious, or other acute and dangerous diseases; what means had been taken to prevent the spread of such diseases: and what other work had been accomplished in the different towns by the Health Officers of the same during 1893, the following circulars were sent at the close of the year:

CIRCULAR No. 131

OFFICE OF SECRETARY OF THE STATE BOARD OF HEALTH

PROVIDENCE, Jan. 1, 1894.

To the Health Officer of

DEAR SIR: An important feature of the Annual Report of the Rhode Island State Board of Health is that of giving a connected history of the occurrence of contagious and epidemic diseases from year to year, as they may have prevailed in the different towns, whether epidemically or in a less degree, together with the location in the town (village or otherwise), and season of the year.

If the proportion of the fatal cases to the whole number of the cases of the same disease could be given, the value of such reports would be very much enhanced. Such proportion can be ascertained only in such towns as *by town ordinance* require physicians to report all cases of such diseases as come within their charge.

An approximate proportion can, however, be given, after the subsidence of the disease, by inquiry of persons living in the immediate neighborhood of the prevalence of such disease, as to the number of the sick, or by house to house visitation where the sickness occurred, with the same inquiry, and by the comparison of the deaths with recoveries as so ascertained.

It is for the purpose of obtaining such information, in full or approximate, and also what may have been done to prevent and restrict diseases, that the questions in the enclosed circular (No. 132) are sent to the various Health Officers of the State

If, therefore, you will have the kindness to reply to the questions in the said circular, according to the best knowledge you have been able to obtain, and forward in the enclosed stamped envelope, you will favor one of the most important interests of the State, and greatly oblige,

Yours truly,

GARDNER T. SWARTS,

Sec. State Board of Health.

CIRCULAR No. 132.

Dear Sir:—Replies to the following questions, as suggested in the accompanying circular (No. 131), are respectfully solicited; said replies to be made on this circular, following each question:

1. Name of Town.

2. Name of Health Officer.

3. Have there been, within your knowledge, any epidemics, or any large prevalence of contagious or infectious diseases in your town during 1893? If so, of what disease or diseases? in what locality or localities? how many of each disease? number of deaths? and in what months of the year?

Locality.	Diseases.	No. of Cases.	No. of Deaths.	Months in which they occurred.

4. Was isolation maintained or attempted?*

5. What proportion of the sick, if any, were isolated?

6. Was any inspection of premises made, where sickness prevailed, as to the sanitary condition of the cellars, pantries, sinks, sink drains, water closets, if any, cess-pools, out-house privies, distance of wells from accumulations of filth, etc., etc.? If so, please give a general statement as to whether they were sanitarily in conditions good or bad, or if anything or place was unusually unsan-

---

* According to the best knowledge obtainable.

itary, give a full description. Or if the cause of any outbreak of disease was found, please state what?

7. Did you make any sanitary inspections during 1893, by order of the town council or from your own option? If so, what were they and how made?

8. Do you know of any location in your town that seems to be particularly unhealthy to any considerable number of persons? If so, and the cause is suspected, can such cause be removed at any reasonable expense?

9. Do you report to your town council nuisances dangerous to the public health, or unsanitary premises within your knowledge; or of buildings unsafe for occupants in case of fire? (See Chapter 495, Section 6, Public Laws.)

10. Has there, to your knowledge, been any contamination of any of the water, milk or ice supplies in your town?

11. Please give names and addresses of dealers in ice in your town?

REPORTS OF HEALTH OFFICERS.

BRISTOL COUNTY.

1. BARRINGTON.

2. A. C. Peirce, M. D.

3. No epidemics in 1893 except of German Measles and slight epidemic of Measles. Location of German Measles, Drownville, number of cases 15 or 20, no deaths; occurred in October, November and December.

4. No isolation was maintained.

5. None isolated.

6. No special inspection made. Most of cases of Measles were in Italian famlies, where cleanliness is unknown.

7. Made no sanitary inspections in 1893 as Barrington had no Health Officer.

8. No localities where infectious diseases are frequent, but conditions are all favorable in and about Italian houses.

9. Have as yet made no such reports. Shall report nuisances which I may be unable to abate.

10. Have no knowledge of contamination of water, milk or ice.

11. E. Tiffany, Barrington, W. A. Leonard, Drownville.

1. BRISTOL.

2. George H. Peck.

3. No epidemics but the following: Twelve caseses of Scarlet Fever, one death, no particular locality, scattered through the year; Typhoid Fever, four cases, one death, no particular locality, scattered through the year; Diphtheria, one death on Thames street, in compact part of town, month of January; eighteen cases of Measles throughout the town during the whole year.

4. Isolation was maintained.

5. All contagious diseases were isolated.

6. Inspection of premises was made where sickness prevailed, in all cases but Measles, and premises found in fair condition.

7. Made sanitary inspections in 1893 from my own option. Cesspools and privy-vaults and several dwellings. By personal inspection.

8. No particular locality appears to be unhealthy.

9. I report to the town council all nuisances dangerous to the public health, as far as I know of them.

10. No contamination of water, milk or ice has occurred in this town.

11. John P. Reynolds, Bristol, R. I.

1. WARREN.

2. M. B. Conroy.

3. No serious epidemic. During January and October there were two deaths from Typhoid Fever; two cases of Scarlet Fever in April and two cases in September; in December, one case of Diphtheria, all cases in compact part of town

4. No quarantine except in Typhoid Fever. Placards displayed. Families generally isolated.

6. My attention was called to two places where sickness prevailed. I had the premises attended to at once.

7. I made a number of sanitary inspections of premises—privies and cesspools

8. I know of no particularly unhealthy location.

9. I do report nuisances.

10. No contamination of water, milk or ice supplies.

11. John H. Brown, Walter S. Bosworth.

KENT COUNTY.

1. COVENTRY.

2. A. C. Richmond. M. D.

3. Five cases of Typhoid Fever and one death in December; several cases of Whooping Cough in December, with two deaths.

4. Proper sanitary precautions were observed.

6. Four cases of Typhoid Fever were from sink-drains leaching in cellars Could find no unsanitary cause for the others.

7. Two sanitary inspections were made by order, and two by my own option, in 1893.

8. I know of no location particularly unhealthy.

9. I report nuisances dangerous to the public health when I know of them.

10. There has been no contamination of water, milk or ice supplies.

11. Job Manchester, Anthony, R. I., Daniel Wood, Washington, R. I.

1. EAST GREENWICH.

2. E. G. Carpenter, M. D

3. Whooping Cough, German Measles and Chicken Pox have been very prevalent from October through the winter. Influenza, in December and January. All cases occurred in the village of East Greenwich and vicinity It

would be impossible to even estimate the number of cases. There were two deaths from Whooping Cough. Whooping Cough was certainly epidemic. The two deaths that occurred were colored children, with wretched surroundings and care, and probably complicated with pneumonia. Influenza was epidemic during last half of December and first half of January, 1894. Number of cases could not be estimated.

4. Isolation was not attempted.

5. None were isolated.

6. Many inspections were made during the year, cesspools and privy-vaults, cleaning and disinfection carried out.

7. Inspections all made from my own option or on complaint of neighbors, and nuisances abated.

8. I know of no particularly unhealthy locality.

9. Have abated nuisances entirely from my own authority. Have made no report to the town council.

10. There has not been, to my knowledge, any contamination of any of the water, milk or ice supplies in this town.

11. Greenwich Ice Co., George Sunderland, Potowomut Ice Co., Charles E. Sweet.

1. WEST GREENWICH.

2. Has no Health Officer.

1. WARWICK.

2. Albert G. Sprague, M. D.

3. LaGrippe; all over town; number of cases unknown; in December. Scarlet Fever in Pawtuxet in December; number of cases unkown. I was called, April 8, 1893, to see William Bowker, living at Arctice, R. I., a patient of Dr. W. A. Paige, who was in doubt in regard to the diagnosis of the case. I found the patient broken out with an eruption that had all the destructive appearances of Varicella and so pronounced it. Varicella was endemic at the time. He had been sick three days; no fever; no headache; temperature normal; said he felt perfectly well, and no backache, and yet he was completely covered with the eruption. Next day I saw him again but began to be suspicious as the eruption did not progress sufficiently rapid for Varicella. I called Dr. Fisher, Secretary of the State Board of Health, to see him, who pronounced it Varicella. Two days afterward he saw him again when pustules began to form and then pronounced it Varioloid. The patient had been vaccinated when young.

It was impossible to get at the origin of the disease. The patient had not been out of River Point for a year, but I am suspicious that he contracted it through the mails as he was corresponding with people in Canada, in which place Small Pox was rife.

Two weeks after James Carley, aged 40, (vaccinated when young) broke out with the characteristic eruption of Varioloid, which proved to be a very mild case. This family consisted of self and four children, two had not been vaccinated and the operation was immediately performed.

None of the children had the slightest symptoms of Small Pox.

The day after Carley was taken sick a girl of Bowkers, aged twelve, came down with confluent Small Pox.

The attending physician was told to vaccinate her, but not having faith in vaccination, considering that internal treatment was all that was necessary. The consequence was it proved to be the severest case of all. A boy of ten years, of the same family, was taken the day after the girl; that proved a mild case of Varioloid. He had been vaccinated. The mother of the family escaped the disease.

In the other part of the house lived a family by the name of Goff. They had moved out before quarantine had been put in force. In about fifteen days after the first case, the oldest boy of this family, James, was taken down, and the whole family was moved back to their former quarters. Harry, four years, Katy, three years, Andrew, six months, James, six years, all were taken within a day or two of each other. James, Harry and Katy had been vaccinated a week previous. These three proved mild cases of Varioloid. Andrew, six months old, was vaccinated two days before he was taken. He had previously been vaccinated but it was not successful. His case was quite severe but was greatly modified, in my opinion, by the second vaccination, as it went through its characteristic course along with the disease.

A large number of people were exposed to the disease, but no cases occurred out-side of the residents of the four-tenement house.

Eight cases in all and with no deaths.

4. Isolation was maintained only in Scarlet Fever.

6. Church House in Pawtuxet in bad sanitary condition, inside and out. No known cause for outbreak of Scarlet Fever.

7. I made sanitary inspections on complaints of individuals all over the town.

8. I know of no location particularly unhealthy.

9. I do report to the town council nuisances dangerous to health.

10. No contamination of water, ice or milk supplies.

11. Clapp & Co., Quidnic, Manchester & Co., Anthony.

NEWPORT COUNTY.

1. JAMESTOWN.

2. Abbott Chandler.

3. Four cases of Diphtheria in the middle part of island, three deaths in May.

4. Isolation was maintained.

5. Sickness confined to one family. A paper was put on the place allowing none to go to or from the place but the physician.

6. Where the sickness prevailed was an old farm house; the pigsty, hen-house, privy and sink drains in years past had been located near the well. There was also water in the cellar.

7. I made sanitary inspections by order of the council and by my own option

8. I do not know of any particularly unhealthy location.

9. I do report to the council nuisances dangerous to health.

10. No contamination of water, milk or ice supplies.

11. Isaac Clarke, Amos Peckham.

PROVIDENCE COUNTY.

1. JOHNSTON.

2. John W. Waters.

3. I was appointed Health Officer in June, 1893, consequently cannot give much information for the first six months, but for the six months, July–December, 1893, I had reported to me 17 cases of Scarlet Fever in all the six months. The cases were all over the town, generally far apart. Only one death from Scarlet Fever.

4. Isolation was not attempted.

5. None were isolated.

6. I had water closets and sink drains cleaned out wherever there was Scarlet Fever or Diphtheria on the premises, and at other times when my attention was called to it.

7. I have made sanitary inspections almost every week since I was appointed. If I found any nuisance I had it cleaned away.

8. I know of no particularly unhealthy location.

9. I report nuisances or unsanitary conditions to the council.

10. No contamination of water, milk or ice supplies.

11. Pocasset Ice Co., Carter & Hohler.

1. LINCOLN.

2. N. Malo, M. D.

3. Ordinance compelling physicians to report contagious and infectious diseases not enacted until November, 1893, consequently a true report cannot be made.

1. PAWTUCKET CITY.

2. George H. Stanley, M. D., (Health Officer 1893.) No report.

1. NORTH PROVIDENCE.

2. Sanford E. Kinnecom.

11. William A. Sweet, Centerdale, Charles O. Angell, Geneva.

1. NORTH SMITFIELD.

2. John B. Greene. No report.

1. Providence City.

2. Superintendent of Health, Charles V. Chapin, M. D.

3. The following extracts from Dr. Chapin's report will fully answer all questions in Circular No. 132.

The number of deaths reported during the year was 3,139, which was 175 more than in the preceding year. The estimated population in 1893 was 150,000, and the death rate based upon this was 20.92. The average for the preceding 37 years was 19.87 per thousand.

There were 309 deaths from diarrhœal diseases in 1893. This was 35 less than in the preceding year. The 309 deaths were 9.48 per cent. of the total deaths.

There were in 1893 ten deaths from malarial diseases, the same as in 1892.

There were 325 deaths from phthisis. This was 10.35 per cent. of all deaths, a smaller proportion than any year since registration was begun.

Epidemic Influenza, which first made its effects felt in January of 1890, reappeared about the middle of December, 1891, and continued during the early part of 1892. During the year it was reported as causing 59 deaths, 34 of which were in January and 11 in February. In 1893 it was reported to a considerable extent during the spring, and for the second quarter of the year 11 deaths were attributed to this disease. It again reappeared in December with greater severity than in the earlier part of the year, and caused 22 deaths in that month. The total deaths from Influenza during the year was 35, as against 59 in 1892. As in preceding years, its debilitating effects and sequelæ helped to swell the death rate of other diseases, particularly those of the respiratory organs.

CONTAGIOUS DISEASES.

Cases of Scarlet Fever, Typhoid Fever and Diphtheria are reported to this office by the attending physicians, who are by law required to make these reports without compensation. The faithfulness and care with which this is done by almost all, speaks highly for their interest in their profession and in the public welfare. Some few cases of contagious diseases where there is no physician in attendance are brought to light through the reports of school teachers or by the personal investigation of the medical inspector.

When cases of contagious disease are visited by the medical inspector, the premises are usually examined by him with reference to unsanitary conditions. In the better class of residences, however, particularly when the owner of the house is it occupant, the inspection is omitted unless requested. The results of these examinations, as presented in my report for 1890 seemed to indicate that there was no causative relation between unsanitary conditions, as ordinarily understood, and Scarlet Fever, Diphtheria and Typhoid Fever. The figures for 1892 as shown in the following tables, differ in no marked respect from those of preceding years, and seemed to strengthen my conclusion as above stated.

The following tables show the results of the inspections for the last nine years:

RESULTS OF THE EXAMINATION OF PREMISES IN CASES OF CONTAGIOUS DISEASES.

SCARLET FEVER.

YEAR.	Vaults Full.	Cesspools Full.	Yards Filthy.	Untrapped Sinks.	Defective Waste-Pipes and Drains.	Filthy Cellars.	No Nuisance.	Total.
1885	23	11	14	113	56	20	32	269
1886	16	4	4	101	61	4	45	235
1887	70	9	14	232	88	5	247	665
1888	14	3	9	42	34	3	128	233
1889	4	4	....	42	9	....	51	110
1890	4	2	....	19	4	....	56	85
1891	14	3	3	57	17	2	157	253
1892	12	....	7	34	15	....	186	254
1893	7	7	8	70	22	2	224	410
Total	164	43	59	710	304	36	1,196	2,514

DIPHTHERIA.

YEAR.	Vaults Full.	Cesspools Full.	Yards Full.	Untrapped Sinks.	Defective Waste-Pipes and Drains.	Filthy Cellars.	No Nuisance.	Total.
1885	8	3	4	33	20	4	28	100
1886	24	4	3	97	55	2	86	271
1887	25	5	2	112	49	4	87	284
1888	20	2	7	80	32	4	92	237
1889	16	7	4	68	27	6	89	217
1890	17	1	3	52	28	....	102	203
1891	10	3	5	42	10	2	81	153
1892	3	1	2	12	6	1	73	98
1893	1	1	....	22	7	5	80	116
Total	124	37	30	518	234	28	718	1,679

TYPHOID FEVER.

YEAR.	Vaults Full.	Cesspools Full.	Yards Filthy.	Untrapped Sinks.	Defective Waste-Pipes and Drains.	Filthy Cellars.	No Nuisance.	Total.
1885	10	3	5	39	28	3	12	100
1886	25	3	6	57	32	4	26	153
1887	10	1	2	27	9	1	21	71
1888	29	9	11	163	51	13	154	430
1889	9	3	1	61	21	3	96	194
1890	13	5	....	27	11	....	46	102
1891	11	1	6	46	20	....	111	195
1892	8	....	3	19	12	5	102	149
1893	4	1	4	15	9	2	100	135
Total	119	26	38	454	193	31	668	1,529

SCARLET FEVER.

The following table gives the results of my observations during the past seven years concerning certain points in the etiology and prevention of Scarlet Fever. This table does not include all the families and cases, as some pass from observation through removal or otherwise; but for 1893 all cases are included:

	1887.	1888.	1889.	1890.	1891.	1892.	1893.	Total.
Number of familes in which there was more than one susceptible child	232	244	73	66	198	220	345	1,378
Number of these in which there is a second case	130	147	30	27	78	90	150	652
Number of susceptible children in all the above families	986	827	242	215	605	711	1,212	4,798
Number of these children who were attacked	452	511	126	105	341	389	642	2,539
Number of additional families with susceptible children in the house where the disease appeared	112	128	18	15	98	154	198	723
Number of susceptible children in these families	381	354	34	30	238	369	493	1,599
Number of these additional families attacked	27	16	0	2	10	21	16	92
Number of children in these families who were attacked	58	21	0	2	12	44	34	171
Number of families where inunction was practiced.	87	99	36	38	124	126	172	682
Number of instances in the above families where the disease spread beyond the first case	44	64	12	15	46	60	131	372
Number of susceptible children in these families	218	496	191	132	382	413	717	2,549

	1887.	1888.	1889.	1890.	1891.	1892.	1893.	Total.
Number of these children who were attacked......	148	319	56	65	198	241	444	1,471
Number of tenements disinfected where there were other families with susceptible children in the house..	49	56	10	4	20	26	42	207
Number of the above where the disease spread to other families in the house...........	5	5	0	0	2	1	22	35
Number of instances where susceptible children were at once removed........................	23	18	10	9	27	42	86	216
Number of instances where they were attacked on their return...........	3	1	0	0	0	2	12	19

It will be noticed that the figures do not differ much from year to year, and that inferences drawn from any particular year apply equally well to all years and to the total.

Of the 86 instances in which well and susceptible children were removed from an infected house, in 74 they returned after the disease was over without contracting it. In almost every one of these cases the children were removed as soon as the diagnosis was established, and the time they stayed away varied from two to eight weeks. In the majority of cases it was four to five weeks. In 39 cases disinfection was done as well as it was possible. Of the other 12 instances, in which the children were not saved from the disease by removal, it may be noted: That in four instances the children were taken sick while away; had either been infected before removal or had become so afterwards and before return. In four instances the initial case was mild and the children were kept away only two, seven, fourteen, and twenty days respectively and no precautions were taken. In another family the children were away four weeks, but returned three days before the house was disinfected. In another case the child who had been sent away returned to the funeral of the first case. In another the child returned six days after the funeral and after disinfection by this department, but complete disinfection was impossible, as the entire house had been infected. In the remaining case the child was away over five weeks, but there was no disinfection.

Besides the cases included in the preceding table, there was one at the Lying-In Hospital, a nurse; and two students at Brown Universtty. All these were at once removed to the Rhode Island Hospital as soon as the eruption appeared, and the appartments occupied by them thoroughly disinfected. No other cases resulted.

The following table shows the number and percentage of persons of different ages exposed to Scarlet Fever who contracted it and also the number who did not. When I began to collect these facts the inspector was not careful to obtain the age in every case, so that until 1890 only a portion of the cases are contained in the table, and in no year are the figures for the ages above sixteen years accurate.

SCARLET FEVER.

Ages.	Cases.							Number Exposed.							Ratio of cases to Number Exposed.
	1887-88.	1889.	1890.	1891.	1892.	1893.	Total.	1887-88.	1889.	1890.	1891.	1892.	1893.	Total.	
Under 1 year..	21	7	1	12	23	22	86	105	11	1	40	54	77	288	29.8
1 "	27	9	3	15	21	45	120	75	11	7	28	45	74	240	50.0
2 years.	86	14	8	23	33	73	237	156	21	16	45	52	108	398	59 5
3 "	86	13	9	30	39	74	251	159	18	13	49	62	98	399	62 9
4 "	83	21	12	32	43	83	274	138	35	13	46	59	110	401	68.3
5 "	71	11	9	48	56	89	284	169	14	14	59	77	117	450	63.1
6 "	83	18	12	42	42	98	295	148	21	19	59	58	129	434	67.9
7 "	80	13	10	40	42	72	257	131	20	18	61	61	111	402	63.9
8 "	61	7	15	17	32	66	198	125	18	25	41	46	104	359	55.1
9 "	55	6	13	31	32	43	180	117	31	18	49	52	77	344	52.3
10 "	35	6	10	18	13	32	114	77	13	6	33	33	70	242	47.1
11 "	37	4	2	24	18	25	110	82	14	8	42	27	54	227	48.4
12 "	24	5	5	8	15	24	81	75	14	15	27	37	58	226	35.8
13 "	20	4	9	10	9	16	68	66	7	10	20	21	46	170	40.0
14 "	15	4	2	14	9	12	56	53	12	11	19	19	43	157	35.6
15 "	12	2	4	7	1	10	36	52	9	6	15	12	30	124	29.0
16 "	9	2	1	8	4	6	30	32	4	11	16	13	27	103	29.1
17 "	5	2	1	2	5	9	24	25	6	2	6	13	21	73	32.8
18 "	....	....	4	3	6	2	15	1	1	8	5	14	20	49	30.6
19 "	3	2	1	3	1	8	18	13	2	1	6	4	19	45	40.0
20 "	4	2	2	3	2	5	18	10	4	4	8	6	16	48	37.5
Adults.........	36	3	3	15	23	46	126	52	4	50	81	138	509	834	15.1
Total	853	155	136	405	466	860	2,878	1,861	290	286	755	903	1,918	6,013	47.8

The following table shows certain interesting facts in the national history of this disease:

	1889.	1890.	1891.	1892.	1893.	Total.
Number of families in which there was more than one child...	121	112	102	77	105	517
Number of these in which there was more than one case.......	47	42	37	19	32	177
Number of children in all the above families....................	472	422	356	269	356	1,875
Number of these children who were attacked..................	231	191	164	112	91	789
Number of additional families with children, in the same house...	38	59	41	62	64	264
Number of children in these families..........................	95	167	89	171	185	707
Number of these additional families attacked..................	7	11	3	1	1	23
Number of children in these families who were attacked......	11	14	7	1	1	33
Number of tenements which were disinfected where there were other families with children in the house..................	9	14	14	9	16	62
Number of instances of the above where the disease spread to other families in the house	1	4	0	1	0	
Number of well children who were at once removed...........	26	28	26	31	42	153
Number of those who were attacked on their return...........	0	2	0	3	1	6
Number of those exposed who had a previous attack...........	51	38	20	18	*40	167
Number of the above attacked..................................	25	8	13	6	†10	62

---

* Of these, 11 were adults, 29 children.

† Of these, 2 were abults, 8 children.

DIPHTHERIA.

The following table shows the number and percentage of persons of different ages exposed to Diphtheria who contracted it, and also the number who did not:

Ages.	Cases.						Number Exposed.						Ratio of Cases to Number Exposed.
	1889.	1890.	1891.	1892.	1893.	Total.	1889.	1890.	1891.	1892.	1893.	Total.	
Under 1 year	3	10	3	4	5	25	23	36	15	21	25	120	20.8
1 "	13	11	8	6	12	50	23	20	22	13	17	95	52.6
2 years....	23	29	15	10	17	94	32	42	27	19	29	149	63.0
3 "	18	26	29	10	20	103	36	40	39	21	25	161	63.9
4 "	23	24	18	12	19	96	32	39	32	27	31	161	59.6
5 "	27	21	23	13	10	94	37	38	41	28	25	169	55.6
6 "	23	19	9	8	14	73	39	29	23	14	30	135	54.0
7 "	17	14	13	14	8	66	35	34	23	26	19	137	48.1
8 "	14	19	11	4	15	63	25	33	29	10	26	123	51.2
9 "	10	12	8	10	6	47	25	27	18	19	18	107	43.9
10 "	13	13	6	7	3	42	22	27	16	19	17	101	41.5
11 "	11	6	7	3	2	29	19	20	10	11	14	74	39.1
12 "	15	12	10	3	5	45	28	25	25	9	18	105	42.8
13 "	4	4	3	1	2	14	9	19	10	9	8	55	25.4
14 "	3	8	2	....	5	18	13	20	6	5	12	56	32.1
15 "	4	2	6	1	1	14	9	8	13	6	6	42	33.3
16 "	2	9	2	1	....	14	6	24	9	6	13	58	24.1
17 "	2	3	9	1	2	17	8	4	16	3	8	39	43.6
18 "	3	4	3	....	4	14	6	8	8	7	8	37	37.8
19 "	2	....	...	2	2	6	5	3	2	4	12	26	73.0
20 "	2	2	1	2	1	8	4	5	4	2	7	22	36.3
Adults....	36	49	32	21	39	179	267	485	181	210	350	1,493	11.8
Totals..........	268	298	218	132	192	1,109	703	986	569	479	718	3,465	32.0

The greatest number of cases and deaths was in the middle of the summer. This is very unusual, for generally it is in the last quarter of the year. The excess of summer cases was entirely confined to one section of the city, and about half of them obtained their milk from the same milkman. This suspicious fact led to a thorough investigation, but it was not found possible to fix the milk supply as the source of the disease, though it may possibly have been. It was no easy matter to get at the facts in the case. The milkman in question had several teams with large routes, and he bought from three other men, and also occasionally sold some to other dealers. As he had no system in dividing his milk, it was difficult to decide which milk any one customer was getting. No cases of Typhoid Fever were found on the milk farms.

TYPHUS FEVER.

The following occurred during my illness and was under the immediate care of the medical inspector, who furnishes this report:

On February 12th Dr. Brug reported a case of suspected Typhus Fever at 37 Tefft street, name Desiderio Capriano, age 27, came from Naples by Anchor Line steamship to New York, arriving Dec. 29, 1892, stopping at 348 One Hundred and Fifteenth street, with Maria Domenico Labri; thence by Stonington Line, arriving in Providence on Dec. 21, 1892. He was taken sick somewhere about February 1st and was attended by Dr. Raia for twelve days, who treated him for a continued fever, and later for meningitis. The symptoms during this time were a temperature not over 101°, general malaria, backache and headache, an eruption over the body and arms which resembled urticaria, of a rose red color, slightly elevated, disappearing on pressure. This gradually disappeared. On February 9th he became delirious and gradually sank into a stupor, with occasional tremors and convulsions requiring two assistants to restrain him upon the bed. When seen by the medical inspector on the 12th, with Dr. Brug, there was the same condition as above, temperature 101°, convulsions, pupils dilated widely, insensible to light and to touch, skin and conjunctiva jaundiced, face purplish color, unconscious, a number of rose-colored spots, many confluent, making patch size of hand, disappear on pressure, no petechiæ, no hemorrhagic spots.

Dr. Palmer was called in consultation and confirmed diagnosis of Typhus. The chief of police was next called upon by the medical inspector for assistance in quarantining the house, a patrolman was detailed from the fourth station and another who served until twelve midnight; from that time until eight A. M. no guard was present. Arrangements were at once made, and after considerable difficulty the Irish family occupying the lower tenement, same end of the house, was removed to another tenement in the vicinity. Owing to the refusal of the landlord to permit the removal of bedding to the tenement, it was agreed to refurnish such as was left behind. Arrangements were made with Vincenzo Capasso, a restauranteur on Spruce street (No. 90), to supply the quarantined family (seven adults) with three meals a day at the rate of $3.50 per week per person.

Dr. Ely was called in consultation about four P. M. and pronounced the case meningitis, but advised all precautions as if a case of typhus. About twelve o'clock the same night, February 15th, the patient died; was buried in the new Catholic Cemetery (St. Francis) the following morning. All bedding, furniture and clothing which had come in contact with the patient or his excretions were burned in the yard, including all food, cooked and uncooked. The rooms were fumigated with sulphur; floor of room and wainscotting of room occupied by the patient were washed in bichloride. All the rest of the family were kept under surveillance till February 20th, at six P. M., during which time no sickness of any kind developed. The length of time of quarantine was based on fourteen days' exposure from beginning of case. The family were visited daily and supplied with fuel. The expenditures for the case were $208.25.

DISINFECTION.

Disinfection after contagious disease in the city is not compulsory and is only done at the request of the family. It is done by this department without charge. The disinfections in 1888 numbered 180; 1889 there were 92; in 1890, 93, and in 1891 there were 132; in 1892 there were 142, 101 for scarlet fever, 28 for diphtheria, 6 for small-pox, 3 for typhus and 2 for cancer. In 1893 there were 176 premises disinfected: for scarlet fever, 158; for diphtheria, 8; for phthisis, 4; for cancer, 2; for typhus fever, 1.

VACCINATION.

During the year 1893 the number of persons vaccinated was 1,905. The only public vaccination has been at the City Hall, Saturday afternoons. Humanized virus only is employed. The number of transfers in 1893 was 26, making the total number of transfers since 1868, when an accurate record was begun, 494. The number of certificates of vaccination issued was 2,359. The following table gives the number of persons vaccinated and the number of certificates issued from 1856 to 1880, and during each year since that time:

YEAR.	Persons Vaccinated.	Certificates Issued.
1856-1880	24,142	32,585
1881	2,307	1,655
1882	1,694	1,690
1883	1,385	1,601
1884	1,137	2,725
1885	17,034	1,776
1886	625	1,856
1887	917	1,437
1888	894	1,676
1889	1,136	1,344
1890	1,438	1,765
1891	1,738	2,112
1892	2,440	2,407
1893	1,905	2,359
1856-1893	58,792	56,978

QUARANTINE.

The following is a list of the vessels visited by the health officer at quarantine and the ports from which they came:

British Provinces	14
West Indies	7
Turk's Island	4
Brunswick, Ga	3
Italy	1
South America	1
Total	30

SWILL.

During the year the swill has been collected by Messrs. A. H. and J. Barney, under contract with the city dated April 18, 1889. This contract is for five years from May 1, 1889. The payment for the service is 15½ cents per annum for each person in the city, the population of the city to be estimated for that purpose each year by the city registrar. At this rate they were paid $1,795.41 each month during the year ending May 1, 1892, and $1,937.50 per month since that date.

The contractors continue to collect the swill in the same satisfactory manner in which they undertook the work. They employ in the business eighteen two-horse teams and one three-horse team.

NUISANCES.

Special attention was given to the removal of privy vaults, in accordance with a resolution of your board adopted in 1892. For the purpose of looking after this matter a special inspector was employed during the first nine months of the year. At the beginning of 1893 there were in the city nearly 11,000 privy vaults, of which 4,888 were on the line of sewered streets. The owners of these vaults had all received notice during the last two months of 1892 that they must make connection with the sewer, discontinue the use of the vault and fill it up with earth or ashes. As soon as the frost was out of the ground in the spring this work began in good earnest and proceeded as rapidly as could be expected until the latter part of the summer. The advent of "hard times" then compelled very many who had contemplated making improvements to postpone them, and it was found entirely impracticable for this department at that time to insist upon the change. It is intended, however, that the work will be pushed another year. During the year there were removed of the vaults on the line of sewered streets, 2,728. These were actually done away with by cleaning out and filling up with earth or ashes. In several hundred other instances steps have been taken towards removal. In some cases water closets have been put in, but the vault is still used by some members of the household; in others it is not used at all but has not yet been cleaned out. The 2,728 referred to above includes none of these. In the older sections of the city, and particularly those parts where the sewers have been longest built, the removal of the vaults has been more complete, in some districts being as high as 75 or 80 per cent. or over. When it is remembered that all this has been accomplished in one season and that the latter part of that was a period of unexampled "hard times," it appears that a very encouraging sanitary advance has been made.

Another reason for the difficulty in enforcing this rule of the board of aldermen is the neglect of the city itself in carrying out its provisions. There are a large number of school-houses on the line of sewered streets which are provided with vaults, and on November 5, 1892, the following ordinance was approved:

CHAPTER CDXX.

It is ordained by the City Council of the City of Providence as follows:

Section 1. The joint committee on city property are hereby directed to remove the privy vaults of all school houses situated on sewered streets and to make the necessary sewer connections for this purpose the cost of said work to be taken from the appropriation for public buildings.

The committee on city property, however, did not cause the removal of any privy vaults except in a few cases where other improvements made it necessary. Thus the city, instead of being the first to carry out its own regulations, is among the last. And this neglect has been a great hindrance to this department in attempting to enforce the law.

PLUMBING LAW.

In my first annual report for the year 1884 the attention of the board of aldermen was called to the need of a plumbing law. Following out the suggestion then made, application was made to the General Assembly and the building law was amended, and on April 24, 1885, the city council was authorized to make rules for the regulation of the plumbing and drainage of all houses thereafter erected. That same year a committee was appointed by the city council and a plumbing law was drafted. After a discussion lasting nearly two years the matter was indefinitely postponed. Finally, however, on March 16, 1893, the board of aldermen directed the committee on health to report on the advisability of enacting a plumbing law. On April 4th that committee reported a plumbing law, which was referred to a joint special committee. That committee gave the proposed law careful consideration and had public hearings, and finally reported favorably. The ordinance was enacted and approved August 4th. On October 23d Reuben S. Bemis was elected inspector of plumbing. The office is independent of the health department. Thus after nearly nine years of delay the city has secured a plumbing law, which will doubtless prove in practice a very good one, and has secured the services of an efficient inspector. The plumbing and drainage of houses is really an extension of the sewerage of the city, and if it is important, as it has certainly been considered to be, to spare no pains or expense to make the street sewers as perfect as possible and to provide for the disposal of the sewage, it is certainly equally important to secure good house drainage into the public sewers. The city has rightly insisted that property owners shall not render useless the great public expenditure for sewers by defective plumbing within the houses.

INSPECTOR OF PROVISIONS.

On December 6, 1892, the office of inspector of provisions was established and the salary fixed at $1,200 per annum. On January 2, 1893, James T. Bucklin was elected inspector.

The number of inspections made between April 1st and September 1st was 1,625. Before that date no record was kept, and after that date the inspector was employed largely in other work. Therefore the total inspections recorded for the year was only 2,787. The total number of places in which decayed or unwholesome provisions were found was 19.

PAWTUXET WATER.

The joint special committee appointed to consider the best method of dealing with the pollution of the Pawtuxet River made their report in the early part of the year, and in consequence the following joint resolutions were adopted and approved March 3, 1893:

Resolved, That the commissioner of public works be and he is hereby directed to contract for a suitable system of mechanical gravity filters capable of filtering fifteen million gallons per day, at a cost of not to exceed one hundred thousand dollars; provided this system of filtration is recommended by the superintendent of health, the commissioner of public works, and the city engineer; and

Resolved, That the commissioner of public works be and he is hereby directed to construct suitable foundations and buildings to receive and contain such filters, at an expense not to exceed thirty thousand dollars, in accordance with plans and specifications to be furnished by the city engineer; and

Resolved, That the commissioner of public works be and he is hereby directed to contract for pneumatic air lifts, of a capacity of fifteen million gallons per day, and at a cost of not to exceed fifty thousand dollars; provided such pneumatic air lifts as a means of lifting water are recommended by the superintendent of health, the commissioner of public works and the city engineer; and

Resolved, That for the purpose of carrying the aforesaid resolutions into effect the sum of one hundred and eighty thousand dollars is hereby added to the appropriation for the construction of the Providence water works, and the city treasurer, acting under the advice of the joint standing committee on finance, is hereby authorized to hire the same.

The time since then has been consumed in experimentation, and no action has as yet been taken in regard to adopting a system of filtration. While the commission to which was referred this question are not yet ready to report, I personally am entirely satisfied that some method of filtering our public water supply is necessary. There is now no question that filtration is of the utmost value in removing dangerous impurities from water. This has been amply demonstrated not only in experimental filters, such as those of the Massachusetts State Board of Health at Lawrence, which have been so carefully worked for a number of years, but also on a large scale in filters in various European countries. It has, of course, long been known that filtration would remove the suspended matter which could be seen by the naked eye, that it would remove some of the coloring matter, though not to any great extent, and that it would decrease the amount of dissolved organic material from twenty to fifty per cent. It is only within recent years, however, that the development of bacteriology has rendered it possible to determine whether such filters can remove the active agents in the causation of disease. The experiments of Percy Frankland in England have demonstrated that the well managed filters of the London water companies remove from ninety-six to ninety-nine per cent. of the bacteria. The Berlin water supply has since 1885 been subjected to bi-monthly bacteriological analyses, and it has been shown that these filters also on an average remove about the same proportion of organisms, though at times, on account of the excessive speed at which they are run, the work is not so satisfactory. The experimental filters at Lawrence give similar results with similar rates of filtration. Most of these experiments refer to water bacteria only; that is, those harmless species which live and thrive in ordinary river water. When disease-producing bacteria are used as tests in experimental filters it is found that the results are even more satisfactory.

In the Lawrence experiments quantities of pathogenic bacteria, such as the typhoid bacillus, were introduced continuously into the filters in much the same way that the water would be contaminated in actual practice, and it was found that in most cases none at all passed through the filter, and in only one case where the rate was less than two million gallons per acre was the number removed less than ninety-nine per cent. By far the larger proportion of European cities which derive their water supply from polluted sources have a fairly efficient system of filtration; Paris, however, is a conspicuous example of a city which has a polluted water supply, and until the present year at least has made no effectual effort to improve it.

Something can be learned of the practical value of filters by considering the prevalence of typhoid fever in cities which filter their water and in those which do not. As examples of cities which drink a water known to be polluted to a considerable extent with human excrement may be mentioned Paris, in which the death rate from typhoid for a number of years past was 9.5 per 10,000 of the population. In Pittsburg it was 9 per 10,000, in Cincinnati 6.9, in Chicago 6.9, in Philadelphia 6.2, in Lowell 8.8, in Lawrence 8.6. The death rate from typhoid fever in the great cities of London and Berlin, both using sand filters, may be cited in contrast. For London it was 1.08 and for Berlin it was 2.05 per 10,000. In the city of Antwerp, whose water is filtered by the Anderson process, there has not been much typhoid fever, although the water is grossly polluted, and in Zurich and Buda-Pesth the introduction of filtration has markedly diminished typhoid fever. Perhaps the most striking illustration of the value of filtration is shown in the case of Altona and Hamburg. These cities are contiguous; in fact they may geographically be considered one city. Both take their water supply from the river Elbe, which also receives their sewage, while as Altona is below Hamburg the water there is much worse than it is at the Hamburg intake. Yet in the epidemic of cholera last summer there were in Hamburg 287 cases to 10,000 of the inhabitants, and at Altona 39 cases per 10,000. Moreover, investigation showed that a large proportion of the cases in Altona were imported cases from Hamburg.

It is often argued that because disease germs are living and capable of rapid reproduction that the removal of a portion, even though it be as much as ninety-nine per cent., can be of little avail. And this would doubtless be true if water were a suitable medium for their growth. But it has been shown by experience that most of the pathogenic bacteria, such as those of typhoid fever and cholera, do not find a favorable field for development in ordinary river waters. The tendency is for them to die out; in fact the tendency of almost all forms of bacterial life is to perish rather than to develop in large and still bodies of deep water of the character of most of our river waters. The conditions for bacterial life as for all other vegetable life of course are very complex, and while certain of these necessary conditions are well known, others are entirely hid from us. The presence of light, the stillness of the water, the using up of certain necessary chemical constituents, and perhaps the presence of other organisms tend to the destruction of the bacteria. But whatever the causes may be, the fact is well recognized that not only in reservoirs but in the distributing mains the number of bacteria tends to diminish.

These facts are shown in Providence, where the water of the Sockanosset reservoir contains fewer bacteria than the river water, although this reservoir is small and the water does not remain there long. In the Hope reservoir, on the contrary, the amount of water is large; so large that it is not entirely renewed in the space of three or four months. In this reservoir tests carried on during a year showed that the bacteria were only one-tenth as numerous as in the water of the Pawtuxet river at the pumping station. The diminution of the number of bacteria by storage is, among other causes, due to two well-recognized agencies. The first of these is time, which gives opportunity for the natural death of the organisms; the other is sedimentation, the bacteria being carried to the bottom partly by their own weight and partly by the falling of other and larger particles. Once at the bottom, they tend in the course of time to there perish. It is possible at times also that the development of the lower forms of animal life, such as the infusoria and crustacea, may result in the direct destruction of the bacteria by these animal organisms.

We thus have every reason to believe that the removal of a high percentage of organisms would diminish the chance of disease in even a greater proportion. And this is amply borne out by the statistics of the practical results of filtration given above. Both theory and practice have amply demonstrated that water so treated is practically a safe water to use for drinking. It is also of interest to know that the cost of a proper system of filtration is not prohibitive, and that so far as Providence is concerned enough money is now spent upon spring waters to filter the whole public supply for all the inhabitants.

PAWTUXET WATER ANALYSES FOR 1893.

The following analyses of the Pawtuxet water were made by Prof. John H. Appleton, of Brown University.

Two analyses were made each month.

The figures signify parts (in weight) in one million parts of water (in weight).

MONTHS.	Total Residue.	Mineral Matter.	Organic and Volatile Matter.	Common Salt.	Albuminoid Ammonia.	Ammonia.
January	51	34	17	5.34	.32	.06
	51	34	17	6.52	.34	.08
February	45	32	13	5.34	.30	.07
	39	23	16	3.56	.22	.04
March	37	24	13	4.75	.24	.06
	66	46	20	3.26	.34	.06
April	35	20	15	3.56	.18	.02
	36	20	16	3.86	.22	.03
May	34	20	14	3.56	.24	.05
	40	27	13	4.15	.16	.04
June	37	24	13	4.74	.30	.02
	40	29	11	5.04	.32	.06
July	43	28	15	4.45	.26	.12
	38	18	20	4.15	.34	.08
August	44	26	18	4.45	.26	.06
	42	26	16	4.74	.26	.02
September	48	27	21	5.63	.28	.04
	48	26	22	5.93	.26	.04
October	53	36	17	7.12	.24	.06
	64	46	18	8.89	.26	.06
November	55	33	22	6.53	.28	.06
	61	41	20	7.41	.28	.04
December	52	33	19	6.53	.26	.03
	53	33	20	7.12	.24	.03

AVERAGES FOR EIGHTEEN YEARS.

The figures signify parts (in weight) in one million parts of water (in weight).

YEAR.	Total Residue.		Mineral Matter.		Organic and Volatile Matter.		Common Salt.		Albuminoid Ammonia.		Ammonia.	
	Average.	Maximum	Average.	Max. imum	Average.	Maximum	Average.	Maximum	Average.	Maximum	Average.	Maximum
1876	50	62	30	44	20	30	5.72	8.50	.24	.40	.06	.11
1877	43	56	24	32	19	24	5.46	7.09	.23	.32	.06	.12
1878	37	54	21	34	16	24	5.47	8.51	17	.25	.04	.10
1879	38	59	24	43	14	24	5.73	10.83	.17	.23	.05	.10
1880	45	70	29	49	16	22	6.35	8.76	.22	.26	.02	.14
1881	41	55	26	40	15	21	4.95	8.07	.21	.28	.02	.05
1882	43	59	27	42	16	25	4.43	6.60	.25	.38	.03	.08
1883	47	64	30	47	17	24	4.60	7.95	.27	.36	.04	.14
1884	45	72	29	43	16	29	4.79	7.33	.19	.32	.04	.14
1885	46	63	30	46	16	24	4.20	6.74	.22	.30	.05	.20?
1886	46	59	29	44	17	25	4.14	5.95	.22	.30	.05	.14
1887	42	63	24	40	18	25	4.18	6.84	.21	.36	.04	.10
1888	41	59	24	40	17	30	5.49	5.62	.20	.30	.05	.14
1889	38	52	22	29	17	27	2.86	4.99	.21	.30	.04	.10
1890	41	55	24	35	17	25	3.63	5.30	.24	.36	.04	.12
1891	51	107	32	74	19	33	3.99	6.52	.23	.38	.04	.14
1892	48	71	29	49	19	29	5.22	8.48	.29	.46	.07	.20
1893	46	66	29	46	17	22	5.27	8.89	.26	.34	.05	.12
Average	44		27		17		4.69		.22		.04	
Maximum		107		74		33		10.83		.46		.20

SPRING WATER.

A large amount of spring water is sold in this city and the business seems to be increasing. People who fear to drink Pawtuxet because of the danger of its pollution prefer in many cases to buy spring water rather than boil tap water. Many persons, too, who scout the idea of a specific pollution of the public supply, dislike its color and taste and the thought of the filth which they have been told finds its way into the river. So far as I know there are nineteen springs from which water has been sold during the year 1893.

Alaska.—Proprietor, Willard H. Brown, 72 Pitman street. This spring is situated at 190 Taunton avenue, East Providence. The soil is very wet and swampy thereabouts and the spring was found in the cellar of the dwelling-house. It is covered over and a pipe carries the overflow to a well in the yard. This is protected by a house and the water is pumped by a wooden pump. The surplus water is carried off so that probably none gets back into the well, and it is protected from surface washings. The well overflows through a drain underground into a swamp near by. Though there is no evidence that this water is contaminated, yet it is certainly not a desirable location for a spring from which water is to be sold. There are a barn and other houses near by. The following is a chemical analysis by George E. Perkins:

Grains to the gallon:

Total Solids.	Mineral Matter.	Organic and Volatile.	Chlorine.	Albuminoid Ammonia.	Free Ammonia.
18-30	11.30	7.	1.96	.065	.020

Bacteriological analysis showed 120 colonies per cubic centimetre.

Arctic.—Formerly considerable water was taken from this spring for use in the city. But it was given up as soon as its position was discovered by Mr. Otis Clapp, of the city engineer's department. The spring is situated on the north side of Ernest street, a quarter of a mile or so east of Eddy street. It appears above the ground from beneath the great trunk sewer, certainly a most unfortunate location. When spring water is to be sold for use by persons who purchase in order that they may have a water on whose purity they can depend, the spring from which it is taken ought to be so situated that there be no possibility of contamination. It is remarkable that one should be chosen for this purpose which flows from under a great sewer. The water as it emerged from the ground was dammed up and bailed into the vessels in which it was carried. The chemical analysis by Professor Appleton was as follows:

The larger figures signify parts (by weight) in one million parts of water (by weight).
The smaller figures signify grains per American gallon of water (weighing 58,372.2 grains).

Total Residue.	Organic and Volatile Matter.	Mineral Matter	Common Salt.	Albuminoid Ammonia.	Ready-formed. Ammonia.	Nitrogen in Nitrates.	Nitrogen in Nitrites.
67	11.	56.	9.194	.08	.02	2 40	0
3.911	.642	3.269	.537	.0046	.0012	.140	0

This is the opinion of the analyst "past sewage contamination," but not immediate danger.

Bacteriological analysis showed by two tests five and four colonies respectively to the cubic centimentre.

The water at the times of the analyses was doubtless perfectly wholesome, but who wants to drink a water from beneath a sewer, and who knows when a break may occur in the sewer and its contents become mingled with the water of the spring?

Beech Tree.—Proprietors, J. E. Fearney & Co., Pawtuxet, R. I. This spring is situated in the town of Warwick. It may be reached from the Greenwich road by turning in to the east on the road just south of Sand Pond at Norwood. The road winds around the pond and terminates at a farm-house at its northeast end. About an eighth of a mile beyond the farm-house is the spring, situated under a large beech tree at the foot of a gravelly bank. There is no possible source of contamination that can be discovered nearer than the farm-house. The surrounding region is all sand and gravel. The spring is unprotected, except by some boards put up to keep the cows away. Some surface water probably runs into it from the bank above whenever it rains. The following is the chemical analysis by George E. Perkins:

Grains per gallon.

Total Residue.	Mineral Matter.	Organic and Volatile.	Chlorine.	Albuminoid Ammonia.	Free Ammonia.
3	1 50	1.50	.84	.06	.0266

Two bacteriological analyses showed respectively 21 and 24 colonies to the cubic centimetre.

Crystal.—Proprietor, George A. Cahoone, Cranston street. This spring is situated on the premises of the owner in Cranston. It is practically a well, stated by the owner to be about fifteen feet deep. It is between the house and the barn, perhaps twenty feet from the house and somewhat farther from the barn. Immediately behind the barn is the privy, and the cesspool is about seventy-five feet distant. The barn and the cesspool are on the slope away from the well. The water is drawn in a bucket. Notwithstanding the analysis, water should not be sold from such a well. The following chemical analysis is by Prof. Edwin E. Calder:

The figures signify grains per gallon.

Total Solids.	Organic and Volatile Matter.	Mineral Matter.	Common Salt.	Albuminoid Ammonia.	Free Ammonia.
3.210	8.75	2.335	.408	.0023	.0035

Two bacteriological tests showed 35 and 46 colonies per cubic centimetre.

Diamond.—Proprietor, F. M. Bush, Mineral Spring avenue. This spring is situated in the town of North Providence, just south of Mineral Spring road, a little west of Charles street. It is on the edge of a brook and at the foot of a gravel bank. The nearest and only apparent source of possible pollution is a barn and house with its out-buildings, about three hundred feet away. The spring is walled up with masonry and is covered with a good roof. The overflow passes out through the masonry in a tile drain-pipe. The water is caught in a vessel as it flows from this and is poured into the demijohns in which it is sold. The following is the chemical analysis by Professor Appleton:

The larger figures signify parts (by weight) in one million parts of water (by weight).
The smaller figures signify grains per American gallon of water (weighing 58,372.2 grains).

Total Residue.	Organic and Volatile Matter.	Mineral Matter.	Common Salt.	Albuminoid Ammonia.	Free Ammonia.
53	10	43	7.14	.04	.01
3.094	.584	2.510	.416	.0023	.0006

The bacteriological analysis showed in two cultures respectively 19 and 17 colonies per cubic centimetre.

Eureka.—Water is not now sold from this spring. It is situated at Hughesdale, in Johnston, directly opposite the Hughesdale Chemical Works. The spring is up on the hill back of the house and barn, and no source of pollution is apparent, as the ground above and behind is woods or pasture. The spring is enclosed in masonry and covered with a roof, and is well protected from surface water. The water was drawn through a wooden pump and the surplus fell back into the spring, carrying with it more or less washings from from the platform. The following is the chemical analysis by Professor Appleton:

The larger figures signify parts (by weight) in one million parts of water (by weight).
The smaller figures signify grains per American gallon of water (weighing 58,372.2 grains).

Total Residue.	Organic and Volatile Matter.	Mineral Matter.	Common Salt.	Albuminoid Ammonia.	Ready-formed Ammonia.	Nitrogen as Nitrates.	Nitrogen as Nitrites.
58.	10.	48.	7.02	.20	.02	1.00	0
3.386	.584	2.802	.410	.0117	.0012	.0584	0

Two bacteriological tests showed 60 and 70 organisms per cubic centimetre after two days' culture; but when the sample was taken from the pump the water was quite discolored, as it had not been used for some time.

Granite.—I think no water is now sold from this spring. It is in North Providence, on the Killingly road, about five miles from the city. It is about a quarter of a mile in from the road and the same distance from any dwelling. As it is on the opposite side of a little valley from the house, there can be no danger of contamination. It is situated in a swampy pasture surrounded by woods. The spring is walled in with masonry and covered with a small building. No surface water can have access to it. The water is dipped out into the vessels in which it is sold. The following is the chemical analysis by Prof. Edwin C. Calder:

The figures indicate grains per gallon.

Total Solids.	Organic and Volatile Matters.	Mineral Matter.*	Common Salt.	Albuminoid Ammonia.	Free Ammonia.
2.334	.700	1.634	.408	.0005	.0005

*Of the mineral matter there was:

Insoluble (sand, etc.)	.291	grains.
Oxides of iron and aluminum	.116	"
Lime Carbonate	.759	"

Two bacteriological tests showed four colonies each to the cubic centimetre.

Hazard Cold Spring.—Proprietor, E. L. Wood, Knightsville, R. I. This is about one and a half miles from Knightsville, at the foot of "Dugaway Hill." It may be reached by turning in to the north along a cart path just beyond the deserted mill tenements. It is about one-fourth of a mile from the road, in the woods near the brook. It is walled up with stone, not cemented. It may receive some surface washing from the path just above; otherwise I cannot see how any contamination is possible. The water is taken by dipping. It is not protected by any covering, and in that location there is hardly any necessity for it. The following is the chemical analysis by George E. Perkins:

The figures represent parts per million by weight.

Total Solids.	Organic and Volatile Matter.	Mineral Matter.	Common Salt.	Albuminoid Ammonia.	Free Ammonia.
40.	11.2	28.8	9.9	.03	0

Two bacteriological tests showed ten colonies each to the cubic centimetre.

Hermit.—Proprietor, William A. Mauran, 235 Waterman street. This spring is on the farm of Edward D. Pearce, in East Providence, at the head of a little artificial pond, just east of the railroad. It is several hundred feet from the house and barn, and the intervening soil is sand and gravel. The spring is walled up with stone, not cemented and not covered. It receives the surface washings from the bank above on which the team stands while loading. At one time the water was dipped up, at another pumped through a rubber hose, and I believe a lead pipe has since been put in for that purpose. Since early autumn I believe, no water has been sold. The following is the chemical analysis by Prof. J. H. Appleton:

The larger figures signify parts (by weight) in one million parts of water (by weight).
The smaller figures signify grains per American gallon of water (weighing 58,372.2 grains).

Total Residue.	Organic and Volatile Matter.	Mineral Matter.	Common Salt.	Albuminoid Ammonia.	Ready-formed. Ammonia.
97.5	**20.**	**7.75**	**9.81**	**.10**	**.02**
5.691	1.167	4.524	.573	.573	.0058

Two bacteriological analyses showed respectively 75 and 121 colonies per cubic centimetre.

Hillside.—Proprietor, Phillip Randall. The spring is in Johnston, on the farm of the proprietor, just over the crest of Rocky Hill on the way to Hughesdale. The spring is on the north side of the road in a swampy pasture, perhaps two hundred feet from the road and as much further from the nearest house. The soil is glacial drift. The spring is enclosed and protected from surface wash by two lengths of cement well pipe set in the ground. The water is dipped out and the surplus flows off over the rim. The spring is protected by a small wooden structure. The following is the chemical analysis by Prof. J. H. Appleton:

The figures indicate grains per gallon.

Total Residue.	Organic and Volatile Matter.	Mineral Matter.	Common Salt.	Albuminoid Ammonia.	Free Ammonia.	Nitrogen as Nitrates.	Nitrogen as Nitrites.
3.735	1.167	2.568	.444	.007	.0012	.0934	0

The bacteriological tests showed 45 colonies to the cubic centimetre.

King Philip.—Proprietor, A. F. Ward, Cranston Print Works, R. I. The spring is on "Dugaway Hill," a short distance beyond the Hazard Cold Spring. It is on the north side of the road in a deep hollow, perhaps 150 feet from the road and 300 or 400 feet from the nearest house. The soil is gravel and drift. It is covered by a wooden building, and I have never been inside, but I am informed that it is stoned up and the water is taken by dipping. The following is a chemical analysis by Albert Fenner, Jr.:

The figures indicate parts in one million parts by weight.

Total Residue.	Organic and Volatile Matter.	Mineral Matter.	Common Salt.	Albuminoid. Ammonia.	Free Ammonia.
43.	12.5	30.5	10.2	.04	0

A sample was taken from the overflow outside the building, and two bacteriological tests showed 17 and 24 colonies per cubic centimetre respectfully.

Manitoba.—Proprietor, F. J. Barton. It is in Johnston, to the south of the Killingly road. It may be reached by taking the first turn to the left after passing the Granite spring. The Manitoba is back of the first farm-house (Barton farm) on the east side of the road. It is about an eighth of a mile from any house or other apparant source of danger. It is in a pasture at the foot of a hill, near a brook. The soil is drift and gravel. The spring is walled in with masonry and is protected by a building. Surface wash cannot get into it. The water is removed with a dipper. The following is the chemical analysis by Prof. Edwin E. Calder:

The figures indicate grains per gallon.

Total Solids.	Organic and Volatile Matter.	Mineral Matter.*	Common Salt.	Albuminoid Ammonia.	Free Ammonia.
3.094	.584	2.51	.700	.0005	0

*Of the mineral matter there was:

Silica and insoluble	.175	grains.
Oxides of iron and aluminum	.175	"
Lime carbonate	1.517	"

Two bacteriological tests showed 36 and 28 colonies to the cubic centimetre after two days' growth.

Nobscot Mountain.—Agents, Henry W. Colley & Co., 106 Westminster street. The spring is in Framingham, Mass., and the description and analysis are taken from the twenty-third annual report of the State Board of Health of Massachusetts: Large spring at base of ledge east side of Nobscot Mountain. Cemented reservoir, five feet by nine feet and five feet deep; covered by small house; water flows by gravity through block-tin pipe to filling station fifty feet below. Water-shed heavily wooded except directly above spring, where two or three acres have been cleared; no houses on water-shed; used for pasturage to a limited extent.

The figures in this analysis indicate parts per 100,000.

Residue on Evaporation.	Chlorine in Excess.	Albuminoid Ammonia.	Free Ammonia.	Nitrogen as Nitrates.	Nitrogen as Nitrites.
3.55	0	0	.0004	0	0

An analysis by Davenport and Williams gives parts per 100,000.

Total Solids.	Organic and Volatile Matter.	Fixed Solids.	Chlorine.
5.5	1.1	4.4	.375

Ochee.—Proprietor, H. N. Angell, 23 Peck street. This spring is situated in a damp meadow a few hundred feet north of the Hartford road and just beyond the "Greek Tavern." The nearest house is about three hundred feet to the east, and though considerably higher than the spring probably cannot drain towards it, owing to a ridge of soapstone rock which runs transversely between. On the other side is another house and large barn, but separated from the spring by a considerable depression. On the whole, I do not see how the spring can receive any contamination through the soil. The spring itself is walled in like a well and covered quite tight with planking The water is pumped with an iron pump into the demijohns or other receptacles in which it is sold. It is very possible that some of the water from the pump may find its way back into the well and carry more or less washings with it. The high bacterial contents of the spring has indicated that this at times is the case. The following is a chemical analysis by Prof. J. H. Appleton:

Carbonate of magnesia	1.126	grains	per gallon	water.
Carbonate of lime	3.198	"	"	"
Sulphate of lime	.443	"	"	"
Sulphate of potash	.881	"	"	"
Sulphate of soda	.414	"	"	"
Chloride of sodium	.560	"	"	"
Alumina and oxide of iron	.747	"	"	"
Insoluble mineral matter	.583	"	"	"
Organic and volatile matter	.886	"	"	"
Undetermined	.155	"	"	"
Total substances (other than water)	8.989			

Bacteriological analysis, November 13th, showed 623 colonies to the cubic centimetre.

Premium.—Proprietor, W. L. Chase, 5 Greenwood street, Auburn. Premium is merely the trade name for the water sold by the above-named from one of the springs already described.

Prophet.—Proprietor, E. E. Drake, 41 Dorance street. This spring is on the Killingly road about four and one-half miles from the city. It is on Potter's "Willow Grove Farm." It is perhaps 150 feet from the road and from the house, but separated from both by a small stream. It is at the foot of gravel banks. There is no apparent source of pollution. The spring is under cover and is walled in with masonry. The water is dipped out. Surface wash does not get into the spring. The following is the chemical analysis by Prof. Edwin E. Calder :

The figures signify grains per gallon.

Total Solids.	Organic and Volatile Matter.	Mineral Matter.	Common Salt.	Albuminoid Ammonia.	Free Ammonia.
3.677	.992	2.685*	.292	.0005	0

*Of the mineral matter there was:

Silica and insoluble	.525 grains.	
Oxides of iron and aluminum	.059	"
Lime sulphate	.525	"
Lime carbonate	.934	"
Magnesic carbonate	.116	"

Two bacteriological tests gave 9 and 11 colonies per cubic centimetre.

Rock Spring.—Proprietor, George W. Ordway, 392 Fountain street. The spring is in Cranston near Thornton village, on the Larkin farm. It is in a stony pasture and comes to the surface just underneath a large rock, from which the spring takes its name. It is not enclosed or protected in any way except by the natural arrangement of the rocks, but there seems to be little chance of surface water getting into it. The barn is about four hundred feet away across a brook, so that pollution from that source seems impossible, and no other source is apparent. The proprietor of this spring purchased the outfit of the man who sold Hermit water, and the name "Hermit" is still on the wagon, but the water is obtained from the Rock Spring. The following is a chemical analysis by George E. Perkins :

The figures signify grains per gallon.

Total Residue.	Organic and Volatile.	Mineral Matter.	Chlorides.	Albuminoid Ammonia.	Free Ammonia.
2.9	.9	2	Trace.	.035	.015

Bacteriological tests show 19 and 26 organisms per cubic centimetre.

Sachem.—Proprietor, William W. Brown, 8 Exchange Place. This spring is on Long Cove street, about 1,000 feet east of Eddy street and 300 or 400 feet from the nearest house. The soil is gravel and sand. It is surrounded by pasture, is walled in with masonry and is covered with a shingled roof. Surface water does not get into it, but there is some wash from the pump by which the water is drawn. The proprietor attempted to remedy this, but has not completely succeeded. I have seen no chemical analysis. A bacteriological test gave 287, 241, 567 and 630 colonies per cubic centimetre. This number was probably due to the water from the pump running back into the sping.

Sockanosset.—Proprietor, David S. Harris, 1100 Broad street. The spring is in Cranston on the Harris farm, on Reservoir avenue, a short distance below the Sockanosset reservoir. It is up the hill a few hundred feet west of the farmhouse. It has been stoned up and filled around with earth, so that it is now practically a well. It is covered over with plank and on this is a sheet of zinc, so that there seems to be no way for the wash water to run back. The water is drawn by means of a pump. There is no apparent source of contamination. The following is a chemical analysis by Prof. J. H. Appleton:

The figures indicate grains per gallon.

Total Residue.	Organic and Volatile matter.	Mineral Matter.	Common Salt.	Albuminoid Ammonia.	Free Ammonia.
1 868	.409	1.459	.273	.0023	.0035

Bacteriological tests showed 24 and 31 colonies per cubic centimetre.

Twin Oak.—Proprietor, James W. Mahy, Fourth street and Highland avenue. This spring is situated on the above premises and comes to the surface on the side of the hill. The formation in this vicinity is rock covered with glacial drift. The house is situated up the hill, which is quite steep, about seventy-five feet from the spring. The cesspool is rather nearer. The spring is open and unprotected. The following by George E. Perkins is the only chemical analysis that I have seen :

Total solids	4 grains to gallon.
Chlorine..................	Trace.
Albuminoid ammonia.	.01 part per million.
Free ammonia.....................	.01 " "

Several bacteriological tests have failed to show over 30 colonies to the cubic centimetre in any instance. If these tests are to be relied upon, it would seem that at the times they were made there was no leakage from the cesspool into the spring. And this is not at all surprising, for proximity does not always indicate a connection between underground waters. But certainly to take water from a spring in such a position and sell it to customers as an unquestionably pure water is a clear imposition. Worse than that, though we may admit that for the time being, at the time of the analysis, it is pure, a spring in that position is certainly in danger with a slight change of conditions of becoming specifically polluted.

The bacteriological tests of these spring waters were made by Dr. Swarts and myself. The duration of culture was two days The chemical analyses are those which have been made for the proprietors of the springs by various chemists, the proprietors usually furnishing the samples. I have had no chemical analyses made except in one or two instances, first, because I had no money available for the purpose, and second, I believe that with most of these springs it is possible to determine their character by an inspection of the surroundings better than in any other way. Not that I do not place much value upon chemical tests and biological tests also in such cases, for I believe that usually much information can be derived from them, and often they are essential and should always be made if possible. Lastly, I think the analyses given are fair enough, for every dealer in spring water honestly believes that his spring "is the best in the place," and would therefore have no motive to deceive in sending a sample to his chemist.

All of these springs except the Nobscot have been visited by me, and most of them several times. I believe that with four exceptions they can all be relied upon to furnish pure water. The four exceptions are the Alaska, Arctic, Crystal, and Twin Oak. There has, however, been no evidence that any one of these have ever yet been contaminated. But they are all so situated that contamination is very possible, so that in this respect they are not any better than the Pawtuxet. We know that that generally contains no dangerous impurities; that it may remain many years in that condition. But we also know very serious contamination may occur, and the city council has wisely deemed it important enough to appropriate a large sum of money to ensure that it shall never be possible again to have dangerously polluted water delivered by the city to the citizens. It is surely the height of presumption for a dealer to offer, in place of that Pawtuxet water, water from a well or spring less than 100 feet from a cesspool, even if at the moment of analysis no pollution is shown.

When I stated that I believed that most of the springs in this vicinity could be relied upon to furnish pure water, I simply meant that the water was pure as it came to the surface. I certainly do not mean to vouch for its condition when delivered to the consumer. In the business of furnishing spring water there are several things to be considered:

First, the spring itself; as I have said, most of those in this vicinity are above suspicion.

Second, is it protected from surface water? When used to supply drinking water in any quantity, a spring ought in most cases to be walled up with stone laid in cement, being first excavated so that a firm foundation can be secured. It should also be covered, to prevent leaves and animals from getting in, and securely fastened so that a rival cannot injure it.

Third, the water should be conveyed from the spring to the vessels in which it is delivered with the least possible danger of contamination. The ideal way is to let it run into the vessels from an overflow pipe. I see no objection to a pump, provided care is taken that the waste water does not run back again. If the water is dipped out, the spring should be deep and kept scrupulously clean.

Fourth, the vessels in which the water is sold should be such that they can be readily examined and easily cleaned, and they must be *kept* clean. I think most of the dealers rinse out the bottles or demijohns before each filling; some rarely do. Some of them clean them at regular intervals with coarse sand or gravel, while others never do it. Plain glass bottles are best, that can be readily inspected. If they are dirty it shows. Large bottles in open wooden crates can be easily examined and are said to be durable; so, too, are "tilts." Demijohns, though chiefly employed, are not readily inspected, and stone jugs are the worst of all.

Fifth, the most exacting care and cleanliness must be exercised by the water dealer and all his employes. The spring and its shelter, the bottles, dippers, funnels, etc., the wagons, and particularly the persons of those who bottle and deliver the water, must be kept exceptionally neat.

Lastly, if one wishes to be sure of obtaining an absolutely safe spring water he must purchase from an honest dealer.

The sole purpose of this business is to furnish a water which is beyond suspicion, and this cannot be done unless all the conditions above referred to are complied with. It is almost needless to add that they are not complied with in most cases.

It is very difficult to get at the truth in regard to the extent of the business in this city. If the statements of the dealers can be believed, nearly 3,000 gallons a day are sold. But this is doubtless beyond the truth, unless the large quantities that are furnished some of the hotels and restaurants are taken into account. Most of the dealers claim to deliver from 100 to 200 gallons per day, and this is probably not so very far out of the way. If we take the smaller amount, as there are seventeen dealers, the aggregate would be 1,700 gallons per day, which at six cents per gallon, about the average price, would amount to over $100. Looking at it from another standpoint, there are about twenty horses and men to be supported by the business, the loss in wear and tear to be met, and the profits of the proprietors of the springs to be secured. Surely $100 a day is scarcely enough for this. There is little doubt then, that our people are paying at least $30,000, perhaps $50,000 per annum, for the purpose of securing a water which shall be perfectly safe to drink. And we have seen that they do not by any means always secure it. Moreover, this large sum of money is expended, not for the benefit of the whole people, but only for a small minority. It would be a large estimate to say that 10,000 persons are supplied in this way.

ARTIFICIAL ICE.

Artificial ice manufactured by the Narragansett Brewing Co. has for some time been sold in considerable quantity in this city. The water from which this ice is made is pumped from driven wells at the brewery in Arlington. I examined biologically the water of these wells soon after they were sunk, and found, as in the case of most such wells in this vicinity, no indication of contamination. Last spring I made another test, and as before found a small number of bacteria in the water—twenty-eight per cubic centimetre. The processes of manufacture are substantially the same as in other artficial ice plants, and it seems to me that there is no more danger of specific contamination than there is in the cutting and handling of pond ice. The water is frozen in zinc pans, and the possibility of contamination with the salts of zinc has been suggested. My opinion was asked in regard to this by several persons who had received a very alarming and anonymous circular, which was presumably distributed by a rival company. I had a sample of the ice sent to Prof. J. H. Appleton, of Brown University, to examine for the presence of zinc. The following is his letter and accompanying report of the analysis of the melted ice:

PROVIDENCE, May 31, 1893.

DR. C. V. CHAPIN:

DEAR SIR—I have carefully tested a sample of *artificial ice* received from you. I hand you the results, in part, on the accompanying slip.

These results are certainly very favorable. The total residue and its constituents are so small as to create at once a favorable presumption with respect to the ice.

I have tested it for zinc, but I cannot say positively whether or not *any* zinc is present. I cannot secure any distinct test for zinc. In my opinion, if any zinc is present it is in such minute quantity that it may be safely disregarded.

Yours respectfully,

JOHN HOWARD APPLETON.

The larger figures signify parts (by weight) in one million parts of water (by weight).
The smaller figures signify grains per American gallon of water (weighing 58,372.2 grains).

Total Residue.	Organic and Volatile Matter.	Mineral Matter.	Common Salt.	Albuminoid Ammonia.	Ready-formed Ammonia.
24.	**6.**	**18.**	....	**.26**	**.06**
1.400	.350	1.050	....	.0152	.0035

Respectfully submitted,

CHARLES V. CHAPIN,

Superintendent of Health.

VITAL STATISTICS FROM SOME OF THE PRINCIPAL CITIES OF THE UNITED STATES FOR 1893.

CITIES.	Population.	Total Deaths.	Deaths per Thousand.	Deaths Under One Year.	Percentage of Whole Number of Deaths.	Deaths Under Five Years.	Percentage of Whole Number of Deaths.	Deaths from Phthisis.	Percentage of Whole Number of Deaths.
Fall River	87,773	1,924	21.92	701	36.36	944	49.06	137	7.12
Newport	20,000	368	18.40	59	16.03	91	24.73	......	......
Worcester	98,000	1,895	19.32	440	23.22	640	33.78	156	8.23
Brooklyn	990,891	21,017	21.09	5,793	27.56	8,763	41.69	2,174	10.34
Bridgeport	58,243	1,086	18.64	284	26.15	408	37.57	110	10.13
New York	1,891,306	44,486	23.52	11,106	24.99	17,865	40.16	5,124	11.51
Lowell	87,191	2,095	24.03	683	32.60	930	44.39	211	10.07
Utica	50,000	1,020	20.40	170	16.67	245	24.01	20	1·97
New Bedford	60,000	1,070	17.83	357	33.36	486	45.52	93	8.70
Somerville	50,000	802	16.04	....	......	.....	......	97	12.09
Haverhill	31,396	522	16.62	110	21.07	147	28.16	85	16.28
Philadelphia	1,115,562	23,655	21.20	5,710	24.14	8,690	36.73	2,672	11.29
Boston	487,397	11,710	24.02	2,531	21 61	3,987	34.05	1,364	11.65
Paterson	90,251	1,734	19.76	525	29.43	724	40.58	207	11.60
Richmond	81,388	2,063	25 34	469	22 73	669	32.42	214	10.37
Cambridge	77,100	1,521	19.73	350	23.01	572	37.60	213	14.00
Knoxville	40,385	636	15.50	148	23.11	241	37.89	85	13.36
Milwaukee	255,000	4,462	17.40	1,650	36.98	2,316	51.90	264	5.91
St. Louis	520,000	10,303	19.81	2,348	22.79	3,548	34.43	984	9.55
Cleveland	325,000	5,261	16.19	1,649	31.34	2,276	43.25	411	7.81
Louisville	200,000	3,266	16.33	616	18.86	992	30.37	331	10.13
Chicago	1,600,000	27,095	16.93	8,070	29.78	12,364	45.63	2,317	8.55
Pittsburg	264,000	5,902	22.35	1,626	27.55	2,549	43.18	449	7.61
Taunton	26,000	580	22.31	116	20.00	161	27.76	47	8.10
Baltimore	455,427	9,554	20.98	2,613	27.35	3,604	37.72	1,099	11.50
Toledo	110,000	1,453	13.21	376	24.50	481	33.10	136	9.36
Syracuse	105,000	1,721	16.38	366	21.26	563	32 71	234	13 59
Rochester	150,000	2,568	17.12	483	18 81	764	29.75	301	11.72
Reading	65,000	914	15.29	238	25.21	350	37.08	116	12.29
Yonkers	35,000	636	18.17	161	25.31	255	40.09	76	11.95
Jacksonville	25,000	547	21.88	117	21.38	167	30.53	81	14.81
Grand Rapids	90,000	1,196	13.29	293	24.49	409	34.19	121	10.11
Atlanta	88,000	1,920	21.81	378	20.73	672	35.00	212	11.04
Minneapolis	223,700	2,223	9.94	572	25.73	820	36.88	228	10.25
Lynn	64,000	1,073	16.76	....	....	356	34 11	101	9.41
Hartford	57,000	1,234	21.65	....	....	348	28.20	148	11.99
New Haven	90,000	2,037	22.63	402	19.73	658	32.30	208	10.21
Portland, ore	90,000	1,008	11.20	173	17.16	238	23.61	107	10.61
Oakland	60,000	774	12.90	168	21.70	215	27.77	83	10.72
San Francisco	330,000	6,061	18.37	1,077	17.77	1,526	26.16	881	14.53
Lawrence	48,000	1,251	26.06	......	....	......	......	97	7.74
Mobile	31,076	839	26.99	188	22.41	241	28.72	128	15.25
Providence	150,000	3,139	20.92	686	21.85	1,039	33 10	325	10.40

VITAL STATISTICS FROM SOME OF THE PRINCIPAL CITIES OF THE UNITED STATES FOR 1893.—Continued.

Deaths from Typhoid Fever.	Percentage of Whole Number of Deaths.	Deaths from Scarlet Fever.	Percentage of Whole Number of Deaths.	Deaths from Diphtheria.	Pecentage of Whole Nnmber of Deaths.	Deaths from Small-pox.	Percentage of Whole Number of Deaths.	Deaths from Diarrhœal Diseases.	Percentage of Whole Number of Deaths.	CITIES.
24	1.24	25	1.29	13	.67	0	0	338	17.56	Fall River.
3	.81	1	.27	2	.54	0	0	14	3.80	Newport.
31	1.63	10	.52	35	1.85	0	0	219	11.56	Worcester.
179	.85	307	1.46	607	2.88	11	.05	1,734	8.25	Brooklyn.
12	1.11	4	.37	35	3.22	0	0	157	14 46	Bridgeport.
381	.85	551	1.24	1,970	4.43	102	.23	3,488	7.84	New York.
53	2.53	18	.86	16	.76	0	0	335	15.99	Lowell.
6	.59	4	.39	25	2.45	0	0	38	3.71	Utica.
29	2.71	8	.75	12	1.12	0	0	129	12.05	New Bedford.
13	1.62	19	2.37	11	1.37	0	0	59	7.35	Somerville.
12	2.29	6	1.14	2	.38	0	0	49	9.39	Haverhill.
456	1.92	267	1.12	892	3.77	5	.02	2,219	9.38	Philadelphia.
148	1.26	248	2.12	476	4.07	4	.03	701	6.99	Boston.
33	1.85	10	.56	66	3.69	1	.05	160	8.96	Paterson.
48	2.32	1	.05	2	.09	0	0	164	7.95	Richmond.
16	1.05	67	4.40	48	3.15	0	0	127	8.35	Cambridge.
27	4.24	......	....	3	.47	0	0	80	12 58	Knoxville.
95	2.13	89	1.99	209	4.68	0	0	663	14.83	Milwaukee.
210	2.03	77	.74	227	2.20	0	0	682	6 61	St. Louis.
153	2.91	46	.87	143	2.78	0	0	564	10.72	Cleveland.
135	4.13	6	18	37	1.13	0	0	177	5.41	Louisville.
670	2.47	329	1.21	975	3.59	23	.08	2,395	8.84	Chicago.
294	4.98	204	3.45	171	2.89	0	0	428	7.25	Pittsburg.
7	1.20	10	1.72	6	1.03	0	0	57	9.83	Taunton.
224	2.34	36	.37	185	1.93	0	0	760	7.95	Baltimore.
29	1.99	9	.62	75	5.16	0	0	173	11.90	Toledo.
34	1.97	9	.52	97	5.63	0	0	121	7.03	Syracuse.
58	2.25	52	2.02	84	3.27	0	0	192	7.47	Rochester.
25	2.62	7	.64	12	1.27	18	1.90	81	8.58	Reading.
7	1.10	6	.94	27	4.24	8	1.26	84	13.21	Yonkers.
11	2.01	......	....	1	.18	1	.18	35	6.39	Jacksonville.
70	5.88	10	.84	41	3.43	0	0	77	6.44	Grand Rapids.
56	2.91	10	.52	1	.05	0	0	236	12.29	Atlanta.
134	6.02	44	1.98	49	2.20	0	0	171	7.69	Minneapolis.
12	1.12	9	.84	38	3.54	0	0	77	7.17	Lynn.
30	2.43	22	1.78	27	2.19	0	0	86	6.97	Hartford.
29	1.42	59	2.89	109	5.35	1	.05	159	7.81	New Haven.
33	3.27	6	.59	5	.49	3	.29	96	9.52	Portland, Ore.
42	5.43	3	.39	10	1.29	0	0	28	3.62	Oakland.
106	1.75	111	1.83	153	2.52	3	.05	236	3.89	San Francisco.
33	2.64	80	6.39	18	1.44	0	0	128	10.53	Lawrence.
16	1 90	0	0	3	.35	0	0	43	5.12	Mobile.
50	1.60	97	3.11	46	1.47	0	0	163	9.84	Providence.

STATISTICS OF THE CITY OF PROVIDENCE.

Population by Census.

June 1, 1890	132,146
January 1, 1893	148,944

The estimated population for July 1, 1894, is 153,000.

Area, square miles	15.65

ASSESSED VALUATION.

	1892.	1893.
Real estate	$114 656,860	$119,001,700
Personal estate	40 885,660	40,810,860
Total	$155,512,528	$159,812,560
Rate of tax	$1.50 per $100	$1.50 per $100
Total amount of all tax	$2,413,375.26	$2,557,000.96

STREETS.

	1892.	1893.
Paved	23.8 miles	25.5 miles
Curbed and built, but not paved	121.8 "	131.6 "
Received but not built	40.7 "	36.8 "
Total	186.3 "	193.9 "

Miles of water pipes	257.73	272.88
Number of service pipes in use	16,658	17,417
Numbers of meters in use	10.908	12,088
Averrge daily consumption of water	8,058,414	9.128,563
Miles of sewers	104 929	129.71
Number of sewer connections	7,479	9,442

1. SCITUATE.

2. S. B. Smith, M. D.

3. There have been a very few "scattering" cases of Scarlet Fever, probably from 20 to 30, located all over the town. Also a few cases of German Measles.

4. Isolation was maintained in two instances in my own practice, where the patients were in the village. Patients in the country were quarantined as much as possible.

5 About six per cent. quarantined.

6. I made inspections of premises where sickness prevailed. I think the village of Ashland is in a very bad sanitary condition in regard to sink drains.

7. I made no other sanitary inspections. Hope is a village in Scituate eight miles from this village of North Scituate, and I have very little knowledge of affairs in that section. I think that towns should authorize health officers to make a tour of the town at stated intervals and confer with the local physicians, and in that way could gather some information that would be of value.

8. Ashland is particularly unhealthy. The cause may be removed at no great expense.

9. I do report to the council all nuisances, etc

1. SMITHFIELD.

2. Jenckes Smith.

4. Isolation was not attempted.

7. By order of the town council I investigated swill nuisance near Smithfield station.

8. I do not know of any location in this town that seems to be particularly unhealthy to any considerable number of persons.

9. I do report to the town council nuisances dangerous to the public health or unsanitary premises within my knowledge.

10. There has not been, to my knowledge, any contamination of any of the water, milk or ice supplies of the town.

11. William Winsor, Greenville; Arthur Gould, Georgiaville.

1. WOONSOCKET CITY.

2. Dr.'s R. M. Paine, J. C. Maranda, Mr. J. C. Molten.

3. About 100 cases of Scarlet Fever occurred during the winter, all over the city.

4. Isolation was not attempted.

6. In cases where sickness prevailed there was no drainage at all, and most of cesspools and private vaults in poor condition.

7. We visited all over the city and had nuisances abated as much as practicable.

8. I know of no particularly unhealthy location.

9. Nuisances are reported to the city council.

10. Milk is adulterated and there is no milk inspector.

11. Miller Ice Co., Woonsocket Coal & Ice Co., A. J. Kelley.

1. BURRILLVILLE.

2. Thomas Quinn. Appointed November, 1893.

3. No epidemics or large prevalence of contagious diseases.

6. I made inspections of premises. Found sanitary conditions fair.

8. I know of no particularly unhealthy location.

9. I report to the council all dangerous nuisances, etc.

10. No contamination of water, ice or milk supplies.

11. R. S. & F. W. Wood, Harrisville; John F. Moore, Pascoag; Samuel F. Thayer, Harrisville.

1. CRANSTON.

2. D. O. King, M. D. No report.

1. CUMBERLAND.

2. George B. Haines, M. D.

3. There were no epidemics in 1893. There was however, a large and per-

sistent epidemic of Scarlet Fever in the villages of the Blackstone river, continuing throughout the year. There were about twenty cases, with four deaths.

4. Isolation was maintained but imperfectly.

5. A large majority of cases of Scarlet Fever and Diptheria were isolated.

6. Inspections of premises were made. The sanitary condition of the town is generally good.

7. I made sanitary inspections in 1893 of my own option.

8. I know of no particularly unhealthy location in the town.

9. I have not reported nuisances, unsanitary premises or unsafe buildings.

10. The water supply is excellent. Ice very good.

11. Pawtucket Ice Co., Pawtucket; Moshassuck Ice Co., Central Falls; Lonsdale Co., Lonsdale.

1. EAST PROVIDENCE.

2. Mason B. Wood. No report.

1. FOSTER.

2. Henry Arnold, M. D.

3. There were eight cases of Scarlet Fever at Rockland, with two deaths, in March and April. One case of Typhoid Fever in Foster in August.

4. Isolation was maintained.

5. All were isolated.

6. Inspections were made.

7. I made no sanitary inspections.

8. I know of no particularly unhealthy location.

9. I do not report to the town council.

10. No contamination of water, milk or ice supplies.

11. No ice dealers in town.

1. GLOCESTER.

2. G. A. Harris, M. D.

3. From six to eight cases of Scarlatina were scattered throughout the town, in the winter. No deaths occurred in connection.

4. Isolation was not attempted to my knowledge.

6. I made no inspections where sickness prevailed.

7. I made only one inspection and that not by order of the town council. No sickness caused in that case.

8. I know of no particularly unhealthy location.

10. No contamination of water, milk or ice supplies.

11. There are no regular dealers. Twenty to twenty-five private ice houses in the town. What few others wish ice are supplied by the butchers. Leonard Hopkins is the only one who will be likely to sell this year.

WASHINGTON COUNTY.

1. CHARLESTOWN.

2. H. L. Stillman, M. D. No report.

1. EXETER.

2. No Health Officer.

1. HOPKINTON.

2. George A. Langworthy.

3. There has been no epidemic of any disease but La Grippe.

4. None were isolated to my knowledge.

6. I have not been called or notified of any since my appointment in July, 1893.

7. I made no sanitary inspections in 1893.

8. I do not know of any particularly unhealthy location in town.

9. I have not been called on for any report of any kind.

10. No contamination of ice, water or milk, to my knowledge.

11. William L. Clarke, Ashaway; H. G. Kenyon, Hopkinton; B. F. Smith, Hope Valley.

1. NORTH KINGSTOWN.

2. Stephen E. Reynolds. No report.

1. DISTRICT NARRAGANSETT.

2. L. A. Champlin. No report.

1. SOUTH KINGSTOWN.

2. Frederick C. Gould. No report.

1. RICHMOND.

2. N. K. Church.

3. There have not been any epidemics to my knowledge. There were three cases of Scarlet Fever at Shannock in May. No deaths.

4. Isolation was maintained.

5. All were isolated.

6. No inspections were made as the germs of the disease were supposed to have been brought from Connecticut by a lad that had been sick with Scarlet Fever there.

7. I did not make sanitary inspections.

8. I do not know of any particularly unhealthy location.

9. I have had no occasion to make report of nuisances, etc.

10. There has not been any contamination of water, milk or ice.

1. WESTERLY.
2. Ethan Wilcox.
3. There were no epidemics or large prevalence of disease in 1893.
8. I know of no particularly unhealthy location.
9. I do make report of nuisances, etc.
10. No contamination of water, milk or ice supplies.
11. Lorenzo D. Richmond, Horace Vose.

NEWPORT COUNTY (CONTINUED.)

1. LITTLE COMPTON.
2. Has no Health Officer.

1. MIDDLETOWN.
2. John Peckham.
3. There have been no epidemics nor any large prevalence of contagious diseases during 1893.
7. Pig pens, slaughter houses, privy vaults, sink drains, manure heaps, barns, cellars and wherever there was any liability of filth. Made inspections of my own option.
9. I do report to the town council nuisances dangerous to the public health.
11. No ice dealers in this town.

1. NEWPORT CITY.
2. George C. Shaw.
3 No epidemics or large prevalence of contagious diseases.
4. All cases of Scarlet Fever and Diphtheria are placarded for four weeks. Small Pox has a flag and watchman.
6. Inspections were made.
7. I made house to house inspections.
8. I know of no unhealthy location.
9. I make report of nuisances and unsanitary premises.
10. No contamination of water, milk or ice supplies.
11. Arctic Ice Co., A. A. & H. C. Tilley, William Albro.

1. NEW SHOREHAM.
2. Almanzo Littlefield. No report.

1. PORTSMOUTH.
2. William T. Harvey.

3. There have been no epidemics or prevalence of contagious diseases in Portsmouth during 1893.

7. I made one sanitary inspection of cellar and garbage heap, and one of cesspool and privy vault. These were ordered to be cleaned, which was done.

8. I do not know of any particularly unhealthy location.

9. I do report dangerous nuisances to the town council.

10. No contamination of ice, water or milk supply.

11. Nelson R. Reed, Portsmouth, R. I.

1. TIVERTON.

2. Green Tripp. No report.

METEOROLOGY.

It has been remarked in previous reports of the Board that the influence of the meteorological conditions of the atmosphere, as well as the floating matter suspended therein, are recognized and acknowledged by all pathologists as causes of disease ; and the following tables are therefore introduced, as heretofore, for the purpose of comparing the large prevalence of certain diseases at different monthly periods of the year, with the temperature, the atmospheric pressure, the relative humidity, prevailing direction and force of the wind and other conditions of the atmosphere, and also the amount of cloud and rainfall during each month of the year. All of the said diseases and monthly prevalence of the same may be found in the report upon the registration of deaths arranged by MONTHS, in Table VII of the Registration Report.

The first table is compiled from the monthly reports of the City Engineer of Providence, and shows the mean, maximum and minimum temperature of the different months, and the extremes and average daily range of the same, the rainfall and prevailing direction of the wind.

The second table will give a more comprehensive monthly summary of observations during 1893, including a larger number of atmospheric conditions for each month, and also yearly summaries for each of the eleven preceding years.

It is condensed from the annual summary of monthly observations at Hope Reservoir and the City Hall, in Providence.

TABLE I.

Temperature, Range of Temperature, Rainfall and Prevailing Direction of the Wind, for each Month during the year 1893.

MONTHS, 1893.	TEMPERATURE.							Total amount of Rain or Melted Snow in inches.	Prevailing Direction of the Wind.
	Monthly Mean.	Maximum.	Minimum.	Monthly Range.	Greatest Daily Range.	Least Daily Range.	Average Daily Range.		
January.........	21.4	50.	.0	50	33.5	5.5	14.4	3.47	N. W.
February...... ..	28.1	52.5	3.5	49.	34.	4	15.	7 88	N. W.
March.	35.3	54.5	11.	40.5	26 5	3.	14.	5.59	N. W.
April	45.6	69.	27.	42.	35.5	5.	17.	4.51	N. & N. W. & S.
May.	57.9	88.	40.5	47.5	32.5	4.5	17.8	6.24	S. & N. W.
June........... ..	66	95.5	51.5	44.	29.	3.	17.2	3.59	N. & S.
July	71.5	93.5	54.	39.5	27.	4.	20.	1.10	N. W.
August...........	71.3	91.5	53	38.5	27.	3.5	16.8	4.24	S. & N.
September.........	59.7	77.5	42.	35.5	28.5	6.5	17.5	2.27	N. W. & N.
October.	54.1	75.	30.5	44.5	24.5	3.5	14.	4.25	N. W. & S.
November...... ..	41.2	66.	18 5	47.5	25.	7.5	16.	2.72	N. & N. W. & S. W.
December.........	31.6	60.5	2.	58.5	41.5	7.5	17.6	5.42	N. & N. W. & W.
For the year..	48.6	72.8	28 4	44.8	....	....	..	42.7	N. & N. W.

TABLE II.—*Summary of Meteorological Observations at Hope Reservoir and City Hall, for the Year 1893.*

MONTHS.	BAROMETER. Reduced to Sea Level, and to 32°.				THERMOMETERS.				Relative Humidity.	WIND. Prevailing Direction. No. of Days it was.									WIND.	WEATHER. Atmosphere. No. of days it was.					WEATHER.	RAIN AND SNOW.	
	Mean.	Maximum.	Minimum.	Range.	Mean.	Maximum.	Minimum.	Range.	Mean.	N.	N. E.	E.	S. E.	S.	S. W.	W.	N. W.	Variable.	Mean Velocity.	Clear.	Fair.	Variable.	Rain or Snow.	All others.	Mean Amount of Cloud.	Amount of Rain or Melted Snow in inches.	Depth of Snow in inches.
January	29.87	30.52	29.04	1.48	21.4	50.	0.	50.	72	8	0	0	1	2	3	5	9	3	9	6	7	0	18	0	5.0	3.47†	17.50
February	30.02	30.73	28.84	1.89	28.1	52.5	3.5	49.	73	5	2	0	0	1	2	2	8	8	10	4	6	0	18	0	5.0	7.88†	36.00
March	29.99	30.54	29.21	1.33	35.3	54.5	14.	40.5	74	6	3	1	1	3	2	2	6	7	10	4	9	0	18	0	4.9	5.59†	5.50
April	30.03	30.60	29.39	1.21	45.6	69.	27.	42.	69	4	1	2	1	4	2	2	4	10	9	3	12	0	15	0	5.6	4.51†	7.50
May	29.85	30.26	29.23	1 03	57.9	88.	40.5	47.5	69	1	2	2	2	6	0	4	5	9	9	3	11	1	16	0	5.2	6.24	......
June	29.99	30.30	29.64	.66	66.	95.5	51.5	44.	79	5	4	2	4	5	1	0	2	7	7	1	18	0	11	0	5.7	3.59	......
July	29.91	30.16	29.55	.61	71.5	93.5	54.	39.5	65	1	0	0	1	3	7	2	10	7	7	1	19	0	11	0	4.0	1.10	......
August	29.94	30.23	29.46	.77	71.3	91.5	53.	38.5	77	5	0	1	1	8	1	1	4	10	7	4	12	0	14	1	4.8	4.24	......
September	29.99	30.08	29.88	.82	59.7	77.5	42.	35.5	74	6	0	0	1	4	2	4	8	5	7	6	11	0	13	0	4.4	2.27	......
October	30.07	30.55	29.37	1.18	54.1	75.	30.5	44.5	75	4	3	1	1	5	3	2	5	7	8	8	12	1	9	1	3.8	4.25	......
November	30.04	30.61	29.47	1.14	41.2	66.	18.5	47.5	70	5	0	0	0	2	5	4	5	9	8	6	13	3	8	0	4.1	2.72	......
December	30.03	30.81	29.32	1.49	31.6	60.5	2.	58.5	76	7	0	0	0	2	4	5	6	7	8	7	8	0	15	1	5.1	5.42†	14.00
Means for the year	29.98	......	......	1.13	48.6	......	......	44.8	73	..	..	..	..	..	..	..	..	..	9	....	....	....	....	....	4.8	....	......
Totals for the year	......	......	......	......	......	......	......	......	....	57	15	9	13	45	32	33	72	89	....	53	138	5	166	3	...	51.28	80.50
Extremes	......	30.81	28.84	1.97	......	95.5	0.	95.5	....	..	..	..	..	..	..	..	..	..	....	....	....	....	...	....	....	....	......

† Rain and snow.

TABLE II.—Continued *Summary of Meteorological Observations, at Hope Reservoir and City Hall.*

MONTHS.	BAROMETER. Reduced to Sea Level, and 32°.				THERMOMETERS.				Relative Humidity.	WIND.										WEATHER.						RAIN AND SNOW.	
										Prevailing Direction. No. of Days it was.										Atmosphere No. of Days it was.							
	Mean.	Maximum.	Minimum.	Range.	Mean.	Maximum.	Minimum.	Range.	Mean.	N.	N. E.	E.	S. E.	S.	S. W.	W.	N. W.	Variable.	Mean Velocity.	Clear.	Fair.	Variable.	Rain or Snow.	All others.	Mean Amount of Cloud.	Amount of Rain or Melted Snow in inches.	Depth of Snow in inches.
Yearly Summary for 1892.																											
Means for the year.	29.98			1.06	50.4			43.3	71										8						4.9		
Totals for the year.										50	19	8	10	41	38	52	75	73		47	147	9	156	7		37.39	43.00
Extremes		30.65	28.99	1.66		96.	2.	94.																			
Yearly Summary for 1891.																											
Means for the year.	30.02			1.10	51.7			46.8	74										8						5.1		
Totals for the year.										46	24	8	11	63	40	26	73	74		37	158	7	158	5		53.19	31.25
Exremes.		30.78	28.81	1.97		98.	6.	92.																			
Yearly Summary for 1890.																											
Means for the year.	30.00			1.00	50.4			45.4	74										9						5.4		
Totals for the year.										52	15	6	13	47	32	43	79	78		37	151	7	168	2		50.60	42.00
Exremes		30.88	29.23	1.65		96.	5.5	90.5																			

Yearly Summary for 1889.

Means for the year.	29.99			1.15	51.4			42.3	76										8						5.4		
Totals for the year.										56	31	9	7	61	39	37	71	54		40	142	9	166	8		55.91	17.75
Extremes		30.90	28.93	1.97		92.5	0.5	92.																			

Yearly Summary for 1888.

Means for the year.	30.00			1.21	48.2			46.5	72										9						5.2		
Totals for the year.										54	17	9	11	41	33	34	97	70		54	137	3	167	5		63.44	31.50
Extremes		30.82	28.75	2.07		96.5	5.	101.5																			

Yearly Summary for 1887.

Means for the year.	30.01			1.26	49.4			47.	73										8						5.2		
Totals for the year.										63	22	7	14	45	38	26	77	73		35	147	14	154	15		50.98	54.00
Extremes		30.97	28.94	2.03		94.	—1.5	95.5																			

Yearly Summary for 1886.

Means for the year.	30.01			1.13	48.8			46.8	74										8						5.0		
Totals for the year.										51	27	12	7	56	30	39	69	74		31	143	18	160	10		52.02	54.50
Extremes		30.80	28.69	2.11		95.5	—5.5	101.																			

Yearly Summary for 1885.

Means for the year.	29.98			1.09	48.7			46.6	71										9						4.6		
Totals for the year.										46	21	8	14	56	43	42	74	61		45	157	17	142	4		39.70	27.25
Extremes		30.82	28.99	1.83		93.5	—1.	94.5																			

TABLE II.—Continued. *Summary of Meteorological Observations, at Hope Reservoir and City Hall.*

MONTHS.	BAROMETER. Reduced to Sea Level, and 32°.				THERMOMETERS.				Relative Humidity.	WIND.										WEATHER.						RAIN AND SNOW.	
										Prevailing Direction. No. of Days it was.										Atmosphere. No. of Days it was.							
	Mean.	Maximum.	Minimum.	Range.	Mean.	Maximum.	Minimum.	Range.	Mean.	N.	N. E.	E.	S. E.	S.	S. W.	W.	N. W.	Variable.	Mean Velocity.	Clear.	Fair.	Variable.	Rain or Snow.	All others.	Mean Amount of Cloud.	Amount of Rain or Melted Snow in inches.	Depth of Snow in inches.
Yearly Summary for 1884.																											
Means for the year.	30.01	......	......	1.05	49.5	......	......	49.2	76	..	..	..	..	..	..	..	..	..	9	....	....	....	....	....	5.3	....	......
Totals for the year.	......	.....	......	......	......	......	......	......	....	57	22	8	14	42	60	27	63	73	....	36	127	26	166	11	....	48.76	44.50
Extremes....	......	30.79	28.93	1.86	......	94.	—10.	104.	....	..	..	..	..	..	..	..	..	..	....	....	....	....	....	....	....	....	......
Yearly Summary for 1883.																											
Means for the year.	30.05	.....	......	1.08	48.2	......	......	45.5	72	..	..	..	..	..	..	..	..	..	2.2	.. .	....	....	....	...	5.1	....	......
Totals for the year.	......	......	......	......	......	......	......	......	....	43	31	7	11	44	51	35	70	73	....	45	136	17	156	11	....	39.54	73.00
Extremes......	......	30.77	28.88	1.89	.....	93.	−9.5	102.5	....	..	..	..	..	..	..	..	..	..	...	....	....	...	....	....	...	....	......

Yearly Summary for 1882.

Means for the year.	30.03	......	......	1.03	49.2	......	......	46.	72	..	..	..	..	..	..	..	..	..	2.2	....	....	....	...	....	5.3	....	......
Totals for the year.	......	......	......	......	......	......	......	......	....	54	26	2	16	46	39	40	82	60	....	44	148	31	136	6	...	44.96	74.00
Extremes...	......	30.79	29.22	1.57	......	95.	—11.	106.	....	..	..	..	.	..	..	..	..	..	....	....	....	....	....	....	....	....	......

Yearly Summary for 1881.

Means for the year.	30.00	......	......	1.08	49.6	......	......	44.5	73	..	..	..	..	..	..	..	..	..	2.15	....	....	...	....	...	5.1	....	......
Totals for the year	......	......	......	......	.....	......	......	......	. ...	47	33	12	9	50	47	20	80	67	....	80	73	54	130	28	....	44.79	27.50
Extremes....	......	30.80	28.97	1.83	.....	96.	—4.	100.	....	..	..	..	..	..	..	..	..	..	....	....	....	....	....	....	..	....	......

The force of the wind and amount of cloud are closely approximated in figures from 0 to 10. The rainfall observations previous to 1886 have been corrected for an inaccuracy caused by the imperfection of the gauges with which they were made.

† Snow and rain.

Condensed Table of Meterological Observations in Rhode Island, 1881-1893.

YEARS.	BAROMETER REDUCED TO SEA LEVEL AND TO 32° F.				THERMOMETERS.				HUMIDITY.	PRECIPITAION.		WIND.
	Mean Barometer.	Highest Barometer.	Lowest Barometer.	Mean Range of Barometric Pressure.	Means.	Maximum.	Minimum.	Mean Range.	Mean Humidity.	Rain and Melted Snow in inches.	Number of Days Snow or Rain fell.	Prevailing Direction of.
1893	29.98	30.81	28.84	1 13	48.6	95.5	0.	44.8	73	51.28	151	N. W.
1892	29.98	30.65	28.99	1.66	50.4	96.	2.	43.3	71	37 39	156	N. W.
1891	30.02	30.78	28.81	1.10	51.7	98.	6.	46.8	74	53 19	158	N. W.
1890	30.00	30.88	29.23	1.00	50.4	96.	5.5	45.4	74	50.60	168	N. W.
1889	29.99	30.90	28.93	1.15	51.4	92.5	0.5	42.3	76	55.91	166	N. W.
1888	30.00	30.82	28.75	1.21	48.2	96.5	—5.	46.5	72	63.44	167	N. W.
1887	30.01	30.97	28.94	1.26	49.4	94.	—1.5	47.	73	50.98	154	N. W.
1886	30.01	30.80	28.69	1.13	48.8	95.5	—5.5	46.8	74	52.02	160	Variable.
1885	29.98	30.82	28.99	1.09	48.7	93.5	—1.	46.6	71	39.70	142	N. W.
1884	30.01	30.79	28.93	1.05	49.5	94.	—10.	49.2	76	48.76	166	Variable.
1883	30.05	30.77	28.88	1.08	48.2	93.	—9.5	45.5	72	39 54	156	Variable.
1882	30.03	30.77	29.22	1.03	49.2	95.	—11.	46.	72	44.96	136	N. W.
1881	30.00	30.80	28.97	1·08	49.6	96.	—4.	44.5	73	44.79	130	N. W.

BIRTHS, DEATHS AND MARRIAGES.

1893.

The value of reliable reports in their various bearings, relating to the records of births, marriages and deaths and the items of fact connected therewith, showing the vital movements of the population from year to year, has been so frequently presented in the previous reports of this Board as to need no repetition at this time. It is gratifying, however, to be able to state that, with no exception, persons eminent in social and political science everywhere, recognize the indispensable information such reports furnish, and that in every civilized country they occupy places of importance in the government reports scarcely second to any other department.

The Fortieth Report on the registry of vital movements in Rhode Island was completed and issued by the end of the year, and will be found appended to this report.

The work of collecting the data for the Forty-first Report, the enumerating, classifying, arranging and collecting in tables for the purpose of presenting the various facts in such detail as to facilitate examination and study, has been in progress during the time of making up this report, and affords some facts which may be presented at this time.

Below will be found some of the general results of the registry of births, marriages and deaths during 1893.

BIRTHS.

SEX.		PARENT NATIVITY.	
Males	5,105	Native*	4,259
Females	4,943	Foreign	5,789

Whole number of births 10,048

---

*Including all whose fathers were born in the United States, whether the fathers were of foreign parentage or of native.

MARRIAGES.

Native born Groom and Bride	1,577
Foreign born Groom and Bride	1,224
Native Groom and Foreign Bride	351
Foreign Groom and Native Bride	392
Whole number of marriages	3,544

Native Grooms	1,928	Foreign Grooms	1,616

DEATHS.

SEX.		PARENTAGE.	
Males	3,789	Native	3,101
Females	3,651	Foreign	4,339

Whole number of deaths 7,440

There was one birth to every 37.8 of the population, or 26.5 births in every 1,000

One person married in every 53.6 of the population, or 18.7 persons married in every 1,000

And one death in every 51 of the population, or 19.6 deaths in every 1,000

The following summary will show the rates, per 1,000 of the population, of births, marriages and deaths, for twelve years.

	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892	1893
Birth-rates.............	24.7	24.4	23.9	23.1	24.5	24.2	24.2	24.1	24.7	26.5	25.2	26.5
Death-rates	18.3	18.1	17.1	17.7	18.8	19.9	20.4	19.0	20.1	18.6	20.1	19.6
Excess of Birth-rates over Death-rates........	6.4	6.3	6.8	5.4	5.7	4.2	3.8	5.1	4.6	7.9	5.1	6.9
Marriage-rates,—persons married..........	19.1	18.5	17.2	16.3	17.7	18.0	18.7	18.4	18.5	18.7	19.1	18.7
Ratio of number of marriages.............	9.5	9.3	8.6	8.2	8.8	9.0	9.3	9.2	9.3	9.3	9.6	9.9

The following table will present the number, parentage, and proportion to total mortality of deaths from several of the most prominent causes of death in their order of precedence.

	Whole No. of Deaths.	Percentage of Deaths from all Causes.	Parentage. Native.	Parentage. Foreign.	Excess of Foreign over Native.
Pneumonia	776	10.43	319	457	138
Consumption	722	9.70	230	492	262
Cholera Infantum	603	8.10	286	417	234
Heart Disease	535	7.19	264	271	7
Apoplexy	407	5.47	227	180	—47
Bronchitis	315	4.23	105	210	105
Kidney Disease	302	4.06	141	161	20
Accidents	264	3.54	88	176	88
Brain Diseases	317	4 26	116	141	25
Cancer	205	2.75	124	81	—43
Scarlatina	193	2.60	75	118	43
Old Age	183	2.46	113	70	—43
Diphtheria	157	2.11	57	100	43
All causes	7,440	100	3,101	4,339	1,238

LONGEVITY OF DECEDENTS.

	1893.	1892.	1891.	1890.	1889.
Average age in years of Male decedents	30.97	32.96	31.70	31.04	32.20
Female "	33.99	37.75	36.28	34.26	35.75
Total "	32.46	35.34	34.47	32.62	34.00

There has been a gradual increase during the last thirty years in the average length of life of decedents, taking periods of five years each and a last period of three years, running from about twenty-nine and three-fourths years at the beginning, to thirty-four and one-seventh years at the ending in 1892.

PERCENTAGE OF MORTALITY BY CLASSES.

	1893.	1892.	1891.	1890.	1889.
Zymotic diseases	22.89	24.97	23.11	25.38	22.08
Constitutional diseases	16.04	16.50	17.73	18.48	18.61
Local diseases	46.13	41.89	42.31	40.15	42.10
Developmental diseases	9.74	11.39	11.77	10.89	12.04
Violence, etc	5.20	5.25	5.08	5.10	5.17

The large increase of percentage in the class of local diseases is due to the increase in the number of deaths from pneumonia, the greatest number of deaths being due to this cause in 1893, there being 121 more than in 1892, and 208 more than in 1891.

RATIOS OF MORTALITY.

As compared with the year 1892, there was considerable change in 1893, in the proportional mortality of several of the most important diseases occurring in larger or smaller numbers every year.

Apoplexy and Paralysis.—The deaths from these diseases were nearly the same in each of the years, 338 in 1892 and 335 in 1891. In 1893 these had increased to 407.

Bronchitis.—The deaths from bronchitis were only 7 more than in the previous year. There has been a steady increase in the proportionate mortality from bronchitis during the last twenty years, which must be attributed to something more than increased skill in differential diagnosis.

Cancer.—The deaths from cancer were 205 in 1893 and 181 in 1892. Cancer has increased slightly in its proportion of mortality to whole number of causes of death, during the last twenty-five years.

Cholera Infantum.—There were 603 deaths from cholera infantum in 1893, 633 deaths in 1892 and 546 in 1891. The proportion to whole number of deaths was 8.10 per cent. For the last 29 years it has been about 7 per cent.

Consumption.—As a cause of death, returned under the name consumption, there were 515 cases. Owing to a constant change of nomenclature applied to this condition, reports are variously returned under other names. There should therefore be included under this heading, phthisis, 87 cases, phthisis pulmonalis, 116, and tuberculosis pulmonalis, 3, making a total of 721 deaths from Pulmonary Tuberculosis; the name which should now be applied to this condition as accepted by registration reports generally.

This is 38 less than the number of deaths from the same causes in 1892, and is 9.70 per cent. of all causes. The percentage has been decreasing for the past four years and materially so from the percentages of the last 28 years; and this with improved methods of diagnosis and an increased population is an encouragement.

As will be seen by the table on page 138, pneumonia stands highest on the list as a cause, consumption being second. Pneumonia was the cause in 10.43 per cent. of all causes, and consumption 9.70 per cent.

A decided contrast will be seen in the proportion of the different diseases, by observation of the diagram shown on page 142. Here, considering the conditions for 28 years, it will be seen that consumption has exceeded pneumonia nearly 100 per cent. as a cause.

Diarrhœa and Dysentery.—The mortality from these diseases was 40 less in number than in the previous year, or 159 in 1893, 199 in 1892 and 144 in 1891, but in proportion to entire mortality in 1893, they were only a little more than one-half of one per cent. less than in 1892.

Diphtheria.—This disease had a mortality of 157 in 1893, which was 68 more than in 1892, 132 of these were in Providence county, 65 being in Providence city, the percentage to the whole number of deaths was 2.11. In 1892 it was 1.20, but in 1890 was 3.04, and in 1877 was 11.56.

Fevers, Malarial.—These had a mortality of 20 in 1893 and 25 in 1892, a decrease of 20 per cent.

Fever, Typhoid.—There were 115 deaths from typhoid fever in 1893 and 133 in 1892. Typhoid fever as a disease and as a cause of death, has gradually lessened in both proportions as compared with other important diseases, during the last fifteen years.

Heart, Diseases of.—The deaths from diseases of the heart numbered 535 as against 487 in 1892. Diseases of this organ have, however, been gradually increasing during the last thirty years. See Table LXXVIII, page 209 Reg. Rep.

Influenza.—The number of deaths reported as from this disease in 1893 was only 85, the epidemic of 1892, in which year there were 336 deaths from this cause having subsided.

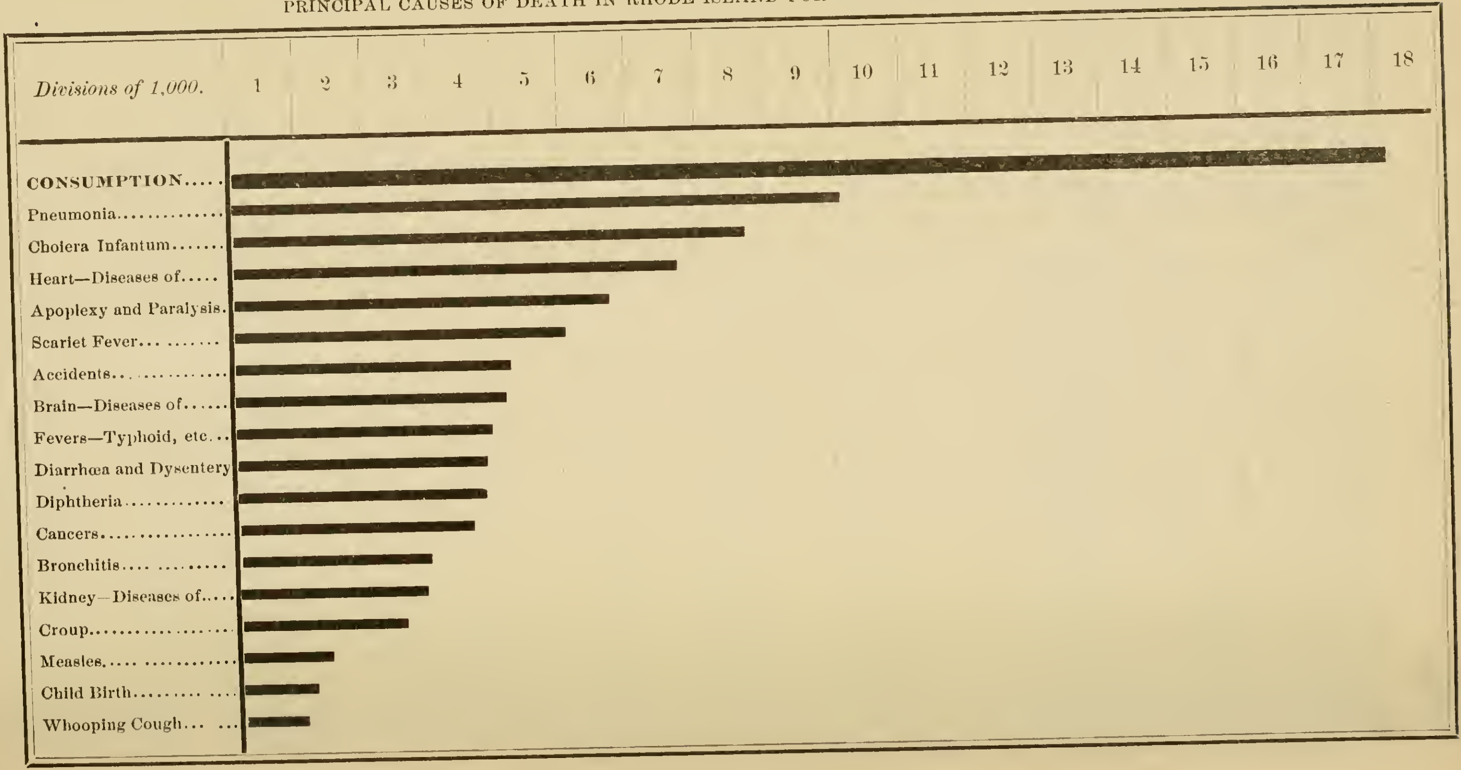
Kidneys, Diseases of.—The number of deaths from diseases of the kidneys in 1893 was 302, the number in 1892 was 258. Diseases of these organs have been gradually assuming large importance as causes of death during the last twenty-five years. The ratio of mortality for five years 1885–89, was nearly four times as large as the ratio for the years 1865–69. See Table LXXXI, page 216 Reg. Rep.

Pneumonia.—The number of deaths caused by pneumonia in 1893, was 776 as against 665 in 1892. Influenza aided largely in the increase of cases of pneumonia and consequently of a larger mortality. Pneumonia has gradually increased in importance as a cause of death for the last fifteen years. See Reg. Rep., Table LXXXVI, page 226.

Scarlatina.—This disease prevailed in a larger number of localities during 1893 than in any year since 1888. The number of deaths was 193, a larger number than in any year previous to 1889. The proportion was 2.6 per cent. of the whole number of deaths. Scarlatina has largely decreased in epidemic prevalence and proportion of mortality during the last fifteen years, as compared with previous periods of fifteen years each.

SMALL-POX.—There were no deaths from small-pox in 1893, there being four the year previous and one each in the previous two years. The diminution of cases and the decrease of mortality as a consequence, has been quite remarkable during the last fifteen years. The efficacy of vaccination has had remarkable endorsement.

DIAGRAM EXHIBITING THE COMPARATIVE MORTALITY BY ABSOLUTE NUMBER OF DEATHS FROM EIGHTEEN PRINCIPAL CAUSES OF DEATH IN RHODE ISLAND FOR TWENTY-EIGHT YEARS, 1865-1892.



MISCELLANEOUS PAPERS AND REPORTS.

FILTRATION OF PUBLIC WATER SUPPLIES.

An Address Delivered at the Annual Meeting of the Rhode Island Medical Society, June 1, 1893, by Charles V. Chapin, M. D., of Providence.

An adequate supply of suitable water is one of the first needs of a modern city. In order to be suitable the public water supply must meet several requirements. In the first place it must be adequate, so that there shall in no case be any danger of a water famine. There must be enough for all purposes; not only for domestic uses, but for fire purposes, for street sprinkling, steam boilers, elevators, etc. In the second place the water should have certain desirable chemical properties. It must not be too hard; it must not corrode or form a scale in steam boilers. Then—and what is for our consideration the most important of all—the water must be wholesome; it must not exert any injurious effect on the health of those who use it; it must not carry with it the germs of disease. Moreover the water must meet certain æsthetic requirements. It is desirable that it should be as nearly colorless as possible, and it is absolutely essential that it shall have no offensive odor or taste.

As regards the quantity of the supply, American cities have taken the foremost rank. Although the principal city of this State presented the unique spectacle of attaining a population of nearly 75,000 people entirely dependent upon wells for their water, now, however, three-fourths of the people of the State make use of a public water supply. The amount of water consumed in American cities is nearly twice as great *per capita* as that consumed in European cities; a large portion of it, however, is a needless waste, as has been shown by the history of those cities that make use of meters, as Providence, where the *per capita* consumption is moderate, and yet there is no question but that every one here has a sufficient quantity of water.

As regards the chemical composition of the water, of course this depends largely on the geological formation of the water-shed from which the water is derived. In this part of the country most of the surface waters are soft and free from injurious salts of any kind. This is certainly so in Providence, whose water supply is most excellent for laundry and boiler purposes.

That water is often the carrier of disease is one of the best established facts of modern sanitary science. Forty or fifty years ago it was demonstrated beyond a doubt that cholera and typhoid fever are disseminated by this means, although the exact nature of the virus of these diseases were not at that time known. The discovery of the causative relation of various forms of bacterial life to the infectious diseases has only served to furnish additional proof of what was well known before, and to explain many of the conditions which were not so thoroughly understood. The researches of Prof. Koch in India and Egypt demonstrated the presence of the cholera organisms in water which had been shown to be the cause of the disease, and numerous investigations in Europe and in this country have demonstrated typhoid bacilli in drinking water as the cause of epidemics of typhoid fever. Four years ago the writer presented to you an account of epidemics of typhoid fever in several American and European cities, including Providence, which were demonstrably due to the specific pollution of the public water supply. Since that time many other instances have been recorded, notably epidemics at Lowell, Lawrence and Newburyport, all due to the pollution of the Merrimac River, and at Chicago due to the pollution of the lake water with the sewage of the city. It has also been shown that the epidemic of cholera in Hamburg last summer was due largely to specifically polluted water. It is quite possible also that other diseases, such as malaria, diarrhœa and dysentery, which are produced by micro-organisms, may be transmitted in drinking water, but the case has never been made out so clearly as for typhoid fever and cholera. It can be positively asserted, then, at the present time, that certainly cholera and typhoid fever, and possibly other parasitic diseases of a similar character, can be carried in drinking water, the active factor in the production of these diseases being of course the living organisms themselves. We know that these minute parasites produce the symptoms of the disease largely through the formation of chemical products such as the ptomaines and toxins, but there is no evidence to show that these products of the ordinary pathogenic organisms ever exist in drinking water in sufficient quantity to affect the health of the users. It is true that instances have been reported where the dark colored water of

Southern swamps, rich in nitrogenous materials, has been supposed to be the cause of gastro-intestinal disorders, and there is no question but that the ingestion of sewage or water considerably polluted by the same has been productive of disease, and the diseases in these cases were due not to the presence of pathogenic organisms in the body but to the action of the chemical substances in solution in the water. In almost all these instances, however, the water was so polluted as to be to the unaided senses manifestly unfit for drinking, and always an ordinary chemical analysis would indicate the very unusual amount of the organic constituents. Certainly the public water supplies of this State do not contain a sufficient amount of any form of organic material in a state of solution to produce any effect upon the health of the users.

The odor and taste of water is of considerable importance. It not unfrequently happens that public water supplies are rendered obnoxious from the presence of certain odors and particularly tastes which have been variously described as "woody," "musty," "fishy," "cucumber," "green-corn," etc. This has happened in the water supplies of Boston and New York city, and in those of a vast number of other towns both in this country and in Europe. The water possessing these characters is entirely unfit for drinking purposes, but there is no good evidence that it is likely to be productive of disease or of any unpleasant symptoms except in delicately constituted invalids. It has been shown that these tastes and odors are almost invariably due to the growth and subsequent decay and death of minute organisms in the water, chiefly algæ, but sometimes fungi. These growths usually occur in shallow reservoirs built on sites containing a large amount of organic matter, but they may occur in deep reservoirs, in driven wells, and even in the distributing pipes. These organisms belong to the vegetable kingdom, and are mostly algæ, this term including such species of whatever family of the the lower order of plants as are provided with chlorophyll in its various forms. Most of these are much larger and have a higher organization than the bacteria. Some of the fungi closely allied to the bacteria and possessing no chlorophyll are, however, sometimes the cause of very serious pollution of the water, as crenothrix, which produced the well-known "calamities" of Berlin and Rotterdam. The number of species which produce disagreeable odors and tastes is very great, but their presence does not always result in altering the taste of the water. It is probable that they must be present in exceptionally large quantity, and furthermore that they must undergo rapid death and decay in order to produce the conditions referred to. They are veritable pests of water works and are wisely dreaded by all water engineers. Much remains to be learned in regard to their laws of growth, but it is known that they are much more likely to occur in water containing a large amount of organic matter, and especially when this is stored in shallow reservoirs. Certain species also seem to require particular chemical ingredients in the water, as iron, sulphur, lime, etc. Besides the bacteria which are directly productive of disease and the algæ just mentioned, various forms of animal life are found in waters. Among these may be mentioned numerous species of infusoria, minute crustacea, such as water fleas, and of course larger forms, such as various fish, reptiles and mollusks, occur. Some of these forms are probably occasionally of value in serving to make way with the dead vegetable material in waters which contain much of such material, but there is no reason to think that it is not in the long run in ordinary waters most desirable to have all forms of animal and vegetable life removed as far as possible, at least from the distributing service.

The color of water, while not in any way affecting health so far as we know, is of importance, for every one likes to drink a colorless water, and it requires much argument to persuade people to drink a dark colored water though it may be known to be pure, in preference to a colorless water which is known to be dangerously polluted. So, too, the presence of suspended mineral matter, as clay and silt, or of vegetable debris, in water, renders it unpleasant, and should not be tolerated in any quantity in a public water supply.

The undesirableness of a water supply may then be due to the presence of pathogenic bacteria, of algæ and other vegetable organisms, of animal forms of life, and of other suspended matters of any kind; also to disagreeable colors or odors; and the presence of an undue amount of such inorganic materials in solution as will injure the water for boiler and laundry purposes. The recognition of color, odor, taste, and suspended matter is of course easy to the unaided senses; the recognition of corroding and scale-forming properties is readily made by means of the ordinary chemical tests; and the determination of all the important forms of organic life is now rendered possible by the exact methods of biologic science.

From the physicians' standpoint it is by far the most important to determine whether or not a water is or is not likely to be the carrier of disease. Before the discovery that the cause of the specific diseases is some form of bacterial life, it was, as has been said, demonstrated beyond question that water contaminated with sewage and human excrement was often the cause of the appearance of various epidemic diseases. To determine whether a given water was or was not the carrier of disease, or was likely to be such, taxed for many years the ingenuity of chemists, but it was ultimately determined that in a general way certain ingredients gave an indication of the amount of contamination and presumably of the relative danger of different waters. The ingredients which were thus used as indices of the potability of waters were chlorine and the various forms of combined nitrogen in albuminoid and free ammonia, nitrites and nitrates. Of course it was well recognized, particularly by sanitarians and physicians, that the presence of these substances was merely an index, though a very fair one, of the degree of pollution which might or might not be injurious to health, the danger depending entirely upon the sources of the organic material which gave rise to these substances. But this method of testing water was for so long the only one known to science and in so many instances gave such good results that many practical chemists thought that these materials themselves were the dangerous ingredients in the water, that they were not merely the indication of something else. We now know that while it is not certain that dead and dissolved organic matter never gives rise to bad symptoms, "albuminoid ammonia" is not in itself productive of disease, at least as it occurs in ordinary water supplies, such as are furnished to the inhabitants of this State. Thanks to the researches of Pasteur and Koch we know that the disease producing agents are bacteria, and the methods devised by Koch have rendered their determination easy by those who are skilled in his methods. The attempt to classify waters as to their wholesomeness by means of a quantitative determination of bacteria cannot, of course, be more than partially successful.

The mere number of the bacteria, just as the simple determination of the ammonia and nitrates, can only furnish a rough *indication* of the degree of pollution. The determination of the species of organisms, however, does give much more definite information. If the organisms present are simply those characteristic of natural waters, and there are many such, the number may be quite large, and yet the water may be perfectly harmless. If, however, organisms be found that are characteristic of human or animal excrement, certainly the water is dangerous. It is not that at that particular moment the water is dangerous, but if there is evidence of excremental pollution it is clear that there may be at any time infection by the disease-producing bacteria.

The critical inspection of the source of a water supply gives in many instances a better indication of its character than even a biological test. If fæcal matter goes into the water that we drink it is certain that the water is dangerous, even if the ammonia and nitrogen be small in quantity and the bacteria be few in number and for the time being of harmless species.

The ultimate source of all our water supplies, of course, is the rain, and this as it falls upon the earth is doubtless without dangerous pollution. Sometimes the rain water does not penetrate the surface of the soil at all, and oftentimes it penetrates only for an extremely small distance. Such waters are properly called surface waters.. Often, on the other hand, the rain water soaks into the soil and passes through it for very considerable distances. It then becomes ground water. Surface water after flowing on the surface or remaining on the surface for any length of time may become ground water. The chemical and biological characters of surface waters and ground waters differ decidedly. The surface waters usually contain a certain amount of organic material in the form of proteid or albuminoid matter which gradually undergoes an oxidation into ammonia, nitrites and nitrates; ground water usually does not contain much albuminoid material, as it has by its slow passage through the soil been oxidized into nitrates. The surface waters are usually soft, while the ground waters are rendered hard by the mineral constituents which they dissolve from the soil. Surface waters contain the various living organisms, both animal and vegetable, which have been referred to; ground waters contain very little life and are often absolutely sterile. In other words, the rain which falls from the clouds, by its passage over the surface of the land and remaining upon it, takes up considerable organic matter in solution and suspension, and serves as a suitable medium for the growth of many organisms, while water that filters slowly through the soil is deprived in great part of these matters, and in their stead takes up non-organic matter from the soil.

Municipal water supplies are sometimes taken from the ground water, as in the case of wells and springs; but in such cases it is apt to be too hard. In the great majority of instances, however, it is only possible to supply a sufficient amount of water by taking the surface water from rivers or lakes. This is the case in all the water supplies in this State. The surface waters in this State not only take up vegetable material, which, though causing considerable color and some odor, is not injurious to health, but they are subject to a certain amount of dangerous pollution of an excremental character. The Pawtuxet river receives pollution from certain privies and sink-drains, and, flowing through a thickly settled region, as it does, is always liable to receive a certain amount of accidental pollution of this nature in times of flood. It also receives a considerable amount of manufacturers' waste, which, though not injurious of itself, yet if the amount should be sufficient, would so increase the organic matter in the river that it would become favorable for the growth of many of the lower forms of vegetable life. The water supply of Providence has been known to contain typhoid bacilli, and there is no reason why this organism may not gain access to some of the other supplies.

The shoal ponds and reservoirs from which all our waters are largely drawn are favorable to the growth of algæ and the production of the unpleasant odors and tastes which result therefrom. Fortunately, as a matter of fact, we have not, in Providence, suffered very much from this cause. Our waters do not contain much mineral matter in suspension, and are not hard; but there is considerable vegetable matter in suspension at times which gives quite a dark color.

The principal factors of pollution in our water supplies are then:

1 (and foremost). The presence of pathogenic bacteria.
2. Of algæ and other non-pathogenic organisms.
3. Of other matters in suspension.
4. Of coloring matter.

Before proceeding to a consideration of the purification of water, I would say that all must agree that it is desirable if possible to obtain a supply from a source which is unquestionably without any danger of injurious contamination; but if for engineering or financial reasons this is not feasible, it becomes of vast importance for us to determine what is the value of natural or artificial methods of improving the character of a given water. A great deal has been said and written about the self-purification of rivers and both the advocates and opponents of the theory that rivers readily purify themselves have taken a very firm stand in the matter. The question, however, is not one which is easily settled. A great many factors must be taken into consideration before we can reach a just conclusion. The question of dilution is an important one. A polluted stream may apparently become purified when in reality there is simply a dilution owing to the addition of pure water either from tributaries or from springs. On the other hand a river may apparently continue without showing any signs of improvement, the improvement being masked by the addition of pollution at various places. Then, too, rivers have shown a falling off in their organic constituents due entirely to a sedimentation of the solid particles of the organic matter, the dissolved portion really indicating an increase; while, on the other hand, an increase, in albuminoid ammonia has been noted which has been due to the growth of algæ and the like feeding upon the dead and dissolved organic matter. The changes just spoken of refer to the chemical purification, and it is this which has received by far the greatest attention from chemists and water engineers during the past.

A study of the biological self-purification of rivers has been made in only a very few instances. The most careful experiments in regard to this self-purification of rivers have been made in the Blackstone below Worcester, by the Massachusetts State Board of Health; in the Thames by Percy Frankland; in the Spree at Berlin, and in the Limmat at Zurich. I think that as a result of these various experiments we may fairly conclude that a diminution of the organic material, particularly by the sedimentation of minute solid particles, but partly through the oxidation of the disolved organic matter, takes place; that this improvement in the great majority of cases is, however, of not very great importance. In regard to bacteria there is also sometimes evidence of a considerable improvement as regards the number found in a river. There are two reasons for such diminution which will be referred to more fully further on. The two causes at work are, first, the death of the organisms which may be expected to occur in water which is not seriously polluted; second, their precipitation together with other particles to the bottom of the stream in case the current is not too rapid. Their death, of course, is a positive gain, but their preciptation is not necessarily so, for it has been shown that the next flood may sweep them from their bed, resulting again in an increased number of these organisms floating in the water. It has been shown that the improvement which has sometimes been noted in streams is thus due chiefly to the element of time. If the river flows slowly enough, a certain number of bacteria will die and a certain number will be precipitated, and there will be a certain amount of dead organic matter oxidized by the various chemical and biological changes which are going on in the stream. It is due to this partial improvement as regards the bacteria in the water that the mortality from typhoid fever and similar diseases is not greater than it is in those cities which are supplied with water from a polluted source. The tendency undoubtedly in such cases is towards a steady improvement in the river water the longer it flows.

The æration of the water of rivers in falling over dams and natural obstructions has been supposed to exert an important influence in purification, but this supposition is not correct; for while dissolved oxygen is necessary for the working of certain purifying changes, an excess of oxygen, introduced by however so efficient æration, has been shown not to extend such process.

In fine it can be stated that, while the self-purification of rivers, both from a chemical and biological standpoint, is to a limited extent well established, it cannot as a matter of fact in practice be relied upon to render a water which has been polluted by excrementitious matter safe for people to drink; and apart from all theoretical and experimental considerations this has been demonstrated by facts in the case of Philadelphia, Providence, Lowell, Lawrence, Hamburg, Berlin, and many other cities.

Seeing that the natural purification of rivers cannot be relied upon to furnish us with pure water, let us see if there are any artificial methods which can render our drinking water less dangerous or perhaps safe. There are several methods employed for the improvement of water which are open for consideration.

1. *Storage.* Though in many cases, perhaps in all cases, the building of large storage reservoirs has been for the purpose of storage simply, and not with the idea of improving the quality of the water, it has been proved that such storage in many cases is of very great benefit. It has been shown by experience that most of the pathogenic bacteria, such as those of typhoid fever and cholera, do not find a favorable field for development in ordinary river waters. The tendency is for them to die out; in fact the tendency of almost all forms of bacterial life is to perish rather than to develop in large and still bodies of deep water of the character of most of our river waters. The conditions for bacterial life as for all other vegetable life of course are very complex, and while certain of these necessary conditions are well known, others are entirely hid from us. The presence of light, the stillness of the water, the using up of certain necessary chemical constituents, and perhaps the presence of other organisms tend to the destruction of the bacteria. But, whatever the causes may be, the fact is well recognized that not only in reservoirs but in the distributing mains the number of bacteria tends to diminish. There are, however, two exceptions to this general rule. Shallow reservoirs where there is much organic matter may further rather than decrease the growth of bacteria, and "dead ends" and other portions of the distributing service where there is an accumulation of sediment may serve as breeding grounds for bacteria. These

facts are shown in Providence where the water in the Sockanosset reservoir contains fewer bacteria than the river water although this reservoir is small and the water does not remain there long. In the Hope reservoir, on the contrary, the amount of water is large, so large that it is not entirely renewed in the space of three or four months. In this reservoir tests carried on during a year showed that the bacteria were only one-tenth as numerous as in the water of the Pawtuxet river at the pumping station. The diminution of the number of bacteria by storage is, among other causes, due to two well recognized agencies. The first of these is time, which gives opportunity for the natural death of the organisms; the other is sedimentation, the bacteria being carried to the bottom partly by their own weight and partly by the falling of other and larger particles. Once at the bottom, they tend in the course of time to there perish. It is possible at times also that the development of the lower forms of animal life, such as the infusoria and crustacea, may result in the direct destruction of the bacteria by these animal organisms. It is evident then that storage cannot be relied on to furnish a safe method of purifying water; but that it is of practical value is shown by the surprisingly low death-rate from typhoid fever in certain cities which make use of water which is in a certain degree polluted but in which the water is a long time in reaching the consumer on account of the large reservoirs and the length of the mains. New York and St. Louis may be instanced as such cities.

2. *Aeration.* It was long believed that the excessive æration of water reduced in a decided degree the amount of organic material dissolved in it, and it was thought also that it was hostile to the growth of the lower forms of vegetable life, including the bacteria. Careful experimenting in the artificial æration of water by the Massachusetts State Board of Health has demonstrated that it has little or no effect in decreasing the organic ingredients, and Professor Leed's experiments upon the water both above and below Niagara Falls, where a natural æration is carried on on a most stupendous scale, showed that there was no chemical purification. There have been few tests to show the relation of æration to bacterial life, but such as there are tend to show that it has no influence one way or the other. While forced æration does not have any effect upon the albuminoid ammonia or on the number of living organisms in the water, yet it does not follow that it is not occasionally of very great practical value. Water which has been rendered somewhat offensive to taste and smell by the growth of algæ and other organisms may be rendered palatable and so far as we know wholesome

by æration. The forced æration of a water under pressure will drive out other gases which are dissolved in it, and as taste and odor are due to the presence of such gases they may be removed by æration. Even strong sulphurated hydrogen water and sewage may be rendered entirely sweet by passing a current of air through them, and waters which are only moderately contaminated by the offensive products of vegetable life are in a practical manner vastly improved by æration.

3. *Sedimentation.* It is of course a general law that all solid particles heavier than water when suspended in water tend gradually to settle to the bottom, the rate of settling depending upon the size and nature of the material. This simple precipitation of the organisms themselves to the bottom has been shown to be an important factor in the so-called self-purification of rivers and reservoirs. Organisms being once carried to the bottom remain there unless otherwise disturbed until some or perhaps all of them entirely perish. That, however, pathogenic organisms may retain their vitality for some time at the bottom of large bodies of water has been shown by experiments upon the mud and deep waters of Lake Geneva, in which living typhoid bacilli were found which must have come from the sewage which had found its way into the lake. At best the sedimentation of such minute organisms which so nearly correspond in density to the density of the water and which in many instances are exceedingly motile, is only partial. But it is a well known fact that heavy particles by their falling tend to carry down others which are lighter and of themselves would precipitate more slowly. This fact has been made use of both in the experimental and the practical purification of water. The experiments of Dr. Frankland show that the agitation of water with such materials as chalk, charcoal and coke, and the subsequent subsidence for forty-eight hours resulted in the removal in many cases of a large number of the organisms. The removal of bacteria by means of an artificial precipitation in the water is accomplished with by far the best results when the precipitation substance is formed in the water by chemical changes. The formation of the particles that precipitate, by entangling the organisms as the precipitate forms, and by the attraction of the particles for the organisms and the subsequent subsidence of all together, is very effectual in carrying the germs to the bottom. Processes are in vogue for the softening of water which consist in the precipitation of the lime in the form of a carbonate. One of these processes, called Clarke's Process, is in operation on a large scale in many water works in England. Dr. Frankland experimented with this process in the laboratory and also examined it

biologically as carried on practically in various places in England. He found a very large reduction in the number of bacteria in the water by this process, sometimes the number removed being as high as ninety-eight or ninety-nine per cent of the whole. Precipitation, however, has never been employed on a practical scale for the express purpose of removing the organisms from water. It is only shown to be undoubtedly of value in such cases as where Clarke's process was employed for other purposes. There are certain practical defects in this process and it has been shown that organisms can be more economically and efficiently removed in other ways.

4. *Filtration.* Under this heading I shall only refer to central filtration or filtration on a large scale by the corporation furnishing the water. Domestic filtration by means of small filters attached to the service pipes has been discussed before you in time past by Dr. Swarts, and perhaps before long he will report to you what progress has recently been made in this line. The filtration of water supplies on a large scale is carried on in three different ways.

First we have what may properly be called "natural filtration." By this method large wells are sunk or filter galleries constructed along the banks of streams or in the bed of the stream and the water of the river percolates through the natural strata of earth, sand or gravel, as the case may be, into the gallery from which it is afterwards pumped.

Such filter galleries or filter wells are in use in quite a number of the smaller towns and cities of Massachusetts and in other parts of the United States. In Europe they exist chiefly in France, at Lyons, Toulouse, Nancy, and other places. According to the investigations of the Massachusetts State Board of Health this method of natural filtration in the majority of cases in that state gives very excellent results. The water is clear, quite free from organisms of all kinds, though there is evidence that there is little or no oxidation of the organic matter taking place. In some instances, notably at Arlington, Wayland and Whitman, the character of the intervening soil is such that the water is not at all improved by this percolation, and sometimes is actually injured, the decomposition of the organic matter which takes place during its passage favoring the growth of the crenothrix and similar organisms. In some cases where there is considerable silt in the river, as at Lowell, the filter gallery, though it may at first give excellent results, soon becomes so clogged that it is impossible to obtain the large amount of water needed. Among the successful filter galleries and wells in Massachusetts may be mentioned those at Newton, Brookline, Waltham and Attleboro. For small places where the soil is of proper character this method of natural filtration may often be advantageously employed; that it is entirely unsuitable to the larger water supplies of this state is the opinion of engineers.

The second method of filtration is by means of artificial sand filters. The English were the pioneers in this line of sanitary improvement, and the filters employed by the London water companies have long been considered models. Filtration was in 1855 made compulsory by act of Parliament for the metropolitan water companies. The severity of the cholera epidemic of 1848–49, which was shown to be largely dependent on the use of polluted water was the origin of this improvement. It was believed that the removal of foreign material from the water would decrease if not eliminate the danger of specific infection, and results have justified the expectation. Perhaps the best managed filters in the world, though they are sometimes run faster than they should be to supply the demand, are at Berlin. The following account is taken chiefly from a paper by Prof. Sedgwick on this subject:

"The first Berlin filters took water from the Spree at Stralau, but in 1877 new filters were constructed on the shore of Lake Tegel. The area of the four larger filters at the latter place is in round numbers 27,000 square feet each, that of the six smaller ones 21,000 square feet. The total filtering area is between five and six acres. The normal yield of the filter is roughly 3,000,000 gallons per day, per acre. The filters are all covered and in order to keep the temperature as low as possible in summer they are protected with a layer of earth and grass. The filtering material consists of three layers. The lowest is about thirty centimeters thick, of rounded granite stones; upon this there rests a layer about thirty centimeters thick of coarse, clean, river-gravel free from sand, and upon this a layer about sixty centimeters thick of medium coarse sand. The average diameter of the sand grains is about one-third of a millemeter. Before the material is placed in position it is carefully cleaned from clay and dirt by special washings. Each filter is fitted with an under drain and with feed pipes. The filter is filled from below in order to drive out the air particles contained in the sand. This filling must be done slowly for otherwise air will remain in spite of it, and will interfere with the successful operation of the filters by forming during its escape channels through which organisms can penetrate into the under layers of sand or gravel. The filtered water is drawn off beneath the several filters by under drains which convey it to a reservoir for purified water placed at such a depth as to receive the effluent by gravity. The ordinary process of filtration is conducted as follows: After a filter has been worked for a time it is found to have become clogged and allows the water to pass through only very slowly. The filter is then described as 'dead' and must be cleaned. It is therefore drained and a gang of men is set to work on it with broad, thin shovels or with special 'scrapers.' Only the uppermost layer of sand and the dirt deposit, one-half inch or less in thickness, is removed. This dirt deposit is extremely interesting. It consists of a thin membranous layer of a greenish brown color, and so well defined that it can be easily peeled off in flakes from the sand below very much as a moistened postage stamp can be peeled from a piece of paper to which it has become partially attached The sand below the dirt is clean and white to a very noticable and striking degree. After the filter is filled with water from below to a depth of three or four feet the outlet is kept closed so that the supernatant water stands quietly upon the sand and is allowed to settle. This is a point of much importance, as the consequence of this setting is the formation of the delicate membrane of dirt upon the clean sand. After a time the effluent is allowed to escape, fresh, unfiltered water flows upon the filter, and filtration proceeds. At first it is, of course, rapid and comparatively imperfect, but as the membranous deposit thickens, it grows slower and yields a better effluent. This early flow, therefore, is allowed to run to waste. The filtration continues with increasing head and diminishing rate until the dirt coating becomes almost impervious, when the filter is again said to be 'dead,' and once more ready for cleaning. Naturally at Berlin the scraping is so arranged as to remove as little sand each time as possible. Gradually, however, the sand layer grows thinner, and after a time it must be replenished with new (or washed) sand to the original depth. This happens about once in two years and requires considerable time. Even the ordinary 'scraping' requires that the filter shall be out of connection for several days. At some seasons scraping is required very often (once a week) but in winter very seldom (once in two or three months). Ice on the water in the filter does not interfere with its working, only with its cleaning; and as this is not often required in winter, advantage may be taken of a warm spell, so that there is practically little difficulty on that score. There is considerable variation in European practice as regards size of the filter bed, the thickness of the sand, the height of the water upon it, the rate of filtration, etc. The thickness of the sand-bed and the fineness of the sand within certain limitations does not seem to exert any influence upon the value of the process. The height of the water is important in relation to the growth of algæ and other organisms, too great shallowness permitting the heating of the water in summer and an excessive vegetable growth. The most important factors are care in the treatment of the filter, its cleaning, and filling with fresh water, the formation of the dirt covering upon the surface through sedimentation, the allowing of the first water to run to waste, and lastly the rate of filtration. In general it may be said that the sand in well managed filters is from one to two feet in thickness; the water stands upon it about four feet deep, and is allowed to remain at rest for forty-eight hours before the filter is started. The time during which the first water is allowed to run to waste varies from three or four days to nearly three weeks in case of the starting of a new bed or the entire removal of the sand. The question of the covering of filter beds is an important one. The covering is, of course, expensive, and interferes to a certain extent with the cleaning, but it prevents the growth of algæ and other organisms and the contamination of the water by the decomposition of dead algæ."

The theory of continuous sand filtration in the manner described is that the dirt film upon the surface of the sand intercepts suspended matter, including bacteria and higher organisms, that the action of the nitrifying organisms in the sand and the dirt layer together with the action of the oxygen of the water in its slow passage through the sand result in the oxidation of a certain portion of the organic matter both suspended and dissolved. As a matter of fact we find that the results of continuous sand filtration are of great importance in improving water which is subjected to this process. This has been amply demonstrated not only in experimental filters, such as those of the Massachusetts State Board of Health at Lawrence which have been so carefully worked for a number of years, but also on a large scale in filters in various European countries. It has, of course, long been known that this method of sand filtration would remove the suspended matter which could be seen by the naked eye, that it would remove some of the coloring matter, though not to any great extent, and that it would decrease the amount of dissolved organic material from twenty to fifty per cent. It is only within recent years, however, that the development of bacteriology has rendered it possible to determine whether such filters can remove the active agents in the causation of disease. The experiments of Percy Frankland in England have demonstrated that the well managed filters of the London water companies remove from ninety-six to ninety-nine per cent. of the bacteria. The Berlin water supply has since 1885 been subjected to bi-monthly bacteriological analyses, and it has been shown that these filters also on an average remove about the same proportion of organisms, though at times, on account of the excessive speed at which they are run, the work is not so satisfactory. The experimental filters at Lawrence give similar results with similar rates of filtration. It is these tests which have shown the great importance of the rate of filtration. The rate in London is about three million gallons per acre per day. In Berlin it is about the same, though at times greater. It is found that when the rate is increased the number of bacteria increases. In Zurich the rate has been from thirteen to fourteen millions of gallons per acre, and the number of organisms removed from 1886 to 1890 averaged only ninety per cent. In other places where little attention is paid to the filters or where they are overworked, the number of organisms passing through varies greatly, and sometimes the number of organisms in the effluent is in excess of the number in the unfiltered water. The experiments of the Massachusetts State Board of Health have demonstrated that a rate from one and a half to two million gallons per acre can be relied upon to remove all pathogenic organisms from water under ordinary conditions. In the bacteriological experiments on large filters in practical use, some, if not all, of the bacteria found in the effluent water are due to growth in the under drains and effluent pipes. In the Lawrence experiments quantities of pathogenic bacteria, such as the typhoid bacillus, were introduced continuously into the filters in much the same way that the water would be contaminated in actual practice, and it was found that in most cases none at all passed through the filter, and in only one case where the rate was less than two million gallons per acre was the number removed less than ninety-nine per cent. By far the larger proportion of European cities which derive their water supply from polluted sources have a fairly efficient system of sand filtration; Paris, however, is a conspicuous example of a city which has a polluted water supply and until the present year at least has made no effectual effort to improve it. In this country there is no good sand filter in use at the present time. One was constructed at Poughkeepsie, but was not adequate and was not properly cared for, and one is now in process of construction at Lawrence. Something can be learned of the practical value of these filters by considering the prevalence of typhoid fever in cities which filter their water and those which do not. As examples of cities which drink a water known to be polluted to a considerable extent with human excrement may be mentioned Paris, in which the death rate from typhoid for a number of years past was 9.5 per 10,000 of the population. In Pittsburg it was 9.00 per 10,000, in Cincinnati 6.9, in Chicago 6.9, in Philadelphia 6.2, in Lowell 8.8, in Lawrence 8.6. The death rate from typhoid fever in the great cities of London and Berlin, both using sand filters, may be cited in contrast. For London it was 1.08 and for Berlin it was 2.05 per 10,000. In the city of Antwerp, whose water is filtered by the Anderson process, there has not been much typhoid fever, although the water is grossly polluted, and in Zurich and Buda-Pesth the introduction of filtration has markedly diminished typhoid fever. Perhaps the most striking illustration of the value of sand filtration is shown in the case of Altona and Hamburg. These cities are contiguous, in fact they may geographically be considered one city. Both take their water supply from the river Elbe, which also receives their sewage, while as Altona is below Hamburg the water there is much worse than it is at the Hamburg intake. Yet in the epidemic of cholera last summer there were in Hamburg 287 cases to 10,000 of the inhabitants, and at Altona thirty-nine cases per 10,000. Moreover investigation showed that a large proportion of the cases in Altona were imported cases from Hamburg.

It is often argued that because disease germs are living and capable of rapid reproduction that the removal of a portion, even though it be as much as ninety-nine per cent., can be of little avail. And this would doubtless be true if water were a suitable medium for their growth. But we have seen that it is not. Therefore the removal of a high percentage of organisms should diminish the chance of disease in even a greater proportion. And this is amply borne out by the statistics of the practical results of filtration given above.

It has been estimated that the cost of sand filters for the daily supply of 10,000,000 gallons for this city would be about $500,000, and that the running expenses, including the interest, would amount to from eight to ten dollars per million gallons filtered.

The last method of filtration which we shall consider is in conjunction with precipitation. I have already referred to the value of precipitation in removing micro-organisms from water, and stated that this process was not entirely practicable by itself. The attempt has been made to combine it with filtration in the iron or Anderson process. This process has been in use a number of years in Antwerp, Dordrecht, and several other places. At first iron was used in the filter bed, but experience showed that this was not practicable, and therefore another method was devised. The apparatus as described by Mr. Anderson in a paper read at the last International Congress of Hygiene, consists of a cylinder, either of cast iron or built up like a boiler of riveted plates, supported horizontally on two hollow trunnions, one of which forms the inlet, the other the outlet for the water. Running inside the shell of the cylinder from one end to the other are a number of curved shelves or scoops. A quantity of metallic iron in small pieces is placed inside the cylinder, which is then slowly rotated while the water to be treated flows through in a continuous stream, thus being brought into intimate contact with the iron while at the same time the iron is itself kept clean and active by its continual friction and movement. The nature of the action which takes place within the cylinder is not known positively, but the most likely theory is that the water, by means of the carbonic acid and oxygen which it contains in solution, acts upon the bright metallic iron, forming ferrous oxide, ferrous carbonate being an intermediate product. The water on leaving the purifier contains a quantity of iron, amounting to about two-tenths of a grain per gallon, partly as ferrous and partly as ferric oxide. The water is next ærated. During this æration the ferrous oxide is entirely converted to the ferric state and subsides to the bottom, carrying with it a large proportion of the organic matter whether suspended or dissolved. The water is next conveyed to a shallow sand filter, by which the finer particles of the iron precipitate are strained out. A fine film of oxide is left on the surface of the filter, and this appears to perform two very important functions—viz., the arrest of the "free ammonia" and of microbes, which are both powerfully retained by the closeness of the film. There are very few data at hand to show the effect of this process of purification except such as have been furnished by parties more or less interested in it in a commercial way; but there seems to be no doubt that it will remove as large an amount of organic material from the water as any other process. How it acts in removing the color I am unable to say. According to the experiments on the Antwerp filter and upon the experimental filters in Paris and Philadelphia, it is fully as efficient as an ordinary sand filter in removing bacteria. This process is worthy of note also for its economy, it being considerably cheaper than simple sand filtration, for owing to the gathering of the flocculent precipitate upon the surface of the filter it is possible to pass the water through it at a much higher rate than could otherwise be done. This process, however, is not applicable to all waters, or at least not without some modification. At the Boston water works it was found to be entirely inapplicable to the water supplied to that city. It seems to require the presence of carbonic acid gas or at least of carbonates in the water, and our waters are rather deficient in these constituents. This process has never been employed on a large scale in this country.

A method of purifying water has been in vogue for some years which makes use of sulphate of alumina for causing an artificial precipitation. The action of the alumina is two-fold. A part of it is decomposed, forming sulphate of other bases and a flocculent precipitate of aluminic hydrate. A part of it also combines directly with some of the organic matter present in the water, coagulating the same and thus helping to increase the precipitation. If the theory is correct and if the usual ingredients exist in the water in proper proportion, all of the sulphate of alumina or its derivatives would be removed in the bed of the filter and none should be found in the effluent water. This is known as "mechanical filtration," though it might better be described as chemical, and it is this method which a commission appointed by the city council of Providence in now investigating. These mechanical filters may be of almost any size or shape; the prevailing forms, however, are either circular wooden or iron tanks about twelve feet in diameter, or closed cylinders six to eight feet in diameter. Sometimes these filters are arranged to act by gravity alone, as do the simple sand filters, and sometimes they work under a pressure, in which case of course the tank has to be closed. The bottom of the tank contains a large number of openings guarded by screens or valves which permit of the outward passage of filtered water and yet retain the sand, and also permit of a powerful reverse current which will stir up and wash the sand in the process of cleaning. In some filters, the cleansing process is hastened by means of some mechanical contrivance for stirring the sand during washing. The sand in the different filters varies from two to four feet in depth. It is much coarser than that in the simple sand filters, and sometimes a crushed quartz is used instead of sand. The filter is started by turning on the water and also the solution of sulphate of alumina. Sometime it is also necessary to add lime or carbonate of soda in order to decompose the sulphate of alumina quickly and completely. For a varying period, amounting in the case of our experiments here to about fifteen minutes, the effluent water is allowed to run to waste while the film of precipitated material is forming on the surface of the sand. The filter then continues to run at the rate of about 125,000,000 gallons per acre for a period of twenty hours, when it becomes so clogged that it is necessary to wash it by reversing the current and sending filtered water rapidly up from the bottom. The washing process usually takes about fifteen minutes. There have not been any thorough tests of these filters previous to those now in progress in this city. The chemical tests that have been made would indicate that there is a diminution of from seventy to eighty per cent. in the organic matter. The visible suspended matter is almost entirely removed, and the color is either completely removed or very nearly so. Very few tests have been made to determine the value of these filters in removing micro-organisms, but since we have been experimenting here I think we have determined that we can reasonably rely upon this style of filter to remove organisms as well as any other method. The effluent water has been shown to contain no trace of the applied alumina salt. The cost of a filter plant of this kind for the daily supply of 10,000,000 gallons would be probably not much over $125,000, and as nearly as can be estimated the running expenses, including interest on the plant, would be about $5 per million gallons filtered.

In conclusion I would say that we can positively affirm that if it is necessary for a municipality to make use of a polluted source for its public water supply, it is necessary that the water should be filtered before it is delivered to the consumer; and, second, that we can be assured that in filtration we have a method by which all, or nearly all, of the dangerous material can be removed from the water. Both theory and practice have amply demonstrated that water so treated is practically a safe water to use for drinking. It is also of interest to know that the cost of a proper system of filtration is not prohibitive, and that so far as Providence is concerned enough money is now spent upon spring waters to filter the whole public supply for the inhabitants. The exact form of filter which is most applicable to the water supply of this city has not yet been determined, and I believe that every town must work out for itself this problem. But it seems evident that efficient filtration in one form or another must come to be generally practised in the United States as it now is in Europe.

THE DISPOSAL OF GARBAGE IN THE CITY OF PROVIDENCE, R. I.*

By Charles V. Chapin, M. D., Superintendent of Health,
Providence, R. I., U. S. A.

The swill or house garbage of Providence is collected and disposed of by contract. The present contract is for five years from May 1, 1889. The contractors receive 15½ cents per annum for each inhabitant, and they are for this amount to collect and dispose of the garbage. At the present time the population of the city is estimated at 139,000, and they therefore receive $21,545 per annum. When the contract was entered into, the contractors expected to dispose of the garbage by delivering it F. O. B. on the cars in the city to a hog-grower, who owned an extensive piggery some distance out in the country, and who had agreed to receive the garbage and pay the expense of transportation. The contract price therefore was estimated to give merely a small margin of profit over the cost of collecting alone, as the disposal was supposed to cost the contractors nothing. After the contract with the city was signed, the arrangement with the piggery people fell through, and the contractors were obliged to seek some other method of disposal. As a result a stock company was formed and a process adopted for disposal by means of naphtha. Arrangements were made with I. M. Simonin, of Philadelphia, who had for many years been conducting the business of extracting grease and oil from various waste products by means of naphtha. Works were constructed near the center of the city in accordance with plans furnished by him. There is in Providence a large area of swampy land, recently filled in, almost in the center of the city. It was on this land, quite a distance from all buildings except two or three large manufactories, that the garbage works were established.

---

* *Presented at the Twentieth Annual Meeting of the American Public Health Association, held in the City of Mexico.* [*Reprinted from Vol. XVIII of the Transactions of the American Public Health Association.*]

The use of naptha for the extraction of fats and oils on a large scale is not a new art. It has been employed by a number of large firms in this country for many years. It was first applied to the utilization of garbage, I believe, by the Baynes Garbage Company, of Buffalo, New York, operating under the patents of the Merz Company of that city. By the Merz process the garbage is first dried as completely as possible in closed, steam-jacketed driers, the moisture being driven off, condensed, and discharged into the sewer or river. The dried garbage, or "tankage," as it is technically called, is then treated with hot, liquid naphtha, which percolates through it and dissolves the grease. It is impossible to thus extract the grease unless the garbage has been thoroughly dried. The drying of the garbage by steam heat, which is necessary under the Merz patents, is an expensive operation. The Providence company at first experimented with the Anderson drier, which is constructed on an entirely different principle from the one used by the Merz people and is continuous in its operation and very economical. It failed, however, to dry the garbage, and hence was abandoned. Garbage contains so many different ingredients and so much grease that it is one of the most difficult substances to dry. The finer portions would come out of the Anderson drier in a very satisfactory condition, but larger masses, like potatoes and apples, were almost unaffected. It is necessary that the whole mass should be finely pulverized so as to become homogeneous and to be subjected to a high temperature for many hours in order to remove all the moisture.

Another experiment was tried by the Providence company for removing moisture. A press was set up, but it was soon discovered that the most powerful hydraulic pressure could not remove much more water than would drain from a pile of garbage in a few hours when merely left upon the floor or in a bin. The failure of the press was also due to the lack of homogeneity in the garbage. If it could be ground before pressing, much more liquid could be squeezed out; but grinding garbage is a very difficult operation and moreover would complicate the process too much. Thus from repeated trials it was found that from an economic as well as from a sanitary standpoint, pressing and drying garbage in the ordinary way were impracticable.

By the process finally adopted and now in operation, the garbage is dried and the grease removed at one and the same time, by treating it in a closed receptable to the action of hot naphtha and naphtha vapor.

In Providence the owners or occupants are required to dispose of ashes and all other refuse, except garbage, at their own expense. The garbage separated from everying else, is kept in tubs or barrels in the yard and is called for by the contractors three times a week during the summer and twice a week during the winter, and oftener in special cases when required by the health officer. The separation of garbage in this way is very thoroughly carried out, and it is only exceptionally that it is mixed with ashes. The contractors use for the collection 16 two-horse carts. These carts are constructed of wood, are water-tight, with covers, and are the following dimensions: width, 3 ft. 8 in., length, 11 ft. 5 in., depth, 2 ft. 6 in., and weigh about 3,300 lbs. The weight of a wagon load of garbage is on an average about two tons. A considerable portion of this weight is due to water, and when the garbage has been left to drain for a few hours it is found to diminish about 50 per cent. in weight though it does not diminish very much in bulk. The garbage immediately after its collection, is carried to the disposal works previously referred to, near the center of the city, which are operated by Mr. I. M. Simonin to whom the contractors deliver the garbage. The garbage is here unloaded upon a concrete floor, where it is allowed to drain of superfluous water, which runs into a river that flows close by. The amount of the liquid is of course in the aggregate not very large, and could be without offence discharged into a small stream or a well-constructed sewer. After it has been allowed to stand here for a few hours, it is loaded into carriages which are at once rolled into the extractors. The carriages carry a series of trays made of sheet-iron and coarse wire netting, so that the garbage is spread in layers about six inches in thickness. This is to prevent the matting together of the garbage, which would result from the pressure of its own weight if it were loaded into the extractor in bulk. The carriages with their trays are made of such a form that they fill the extractors as completely as possible, so that the naphtha will be forced to pass through the interstices of the garbage rather than around the sides of the mass. The extractors are wrought-iron tanks six feet in diameter and eighteen feet long, and calculated to stand a considerable internal pressure. The extractors are placed horizontally, and one head is removable, being lifted off by a tackle from above, and made tight when in place by screw-bolts around the rim. When loaded, an extractor contains about eight tons of garbage as it comes from the floor. The head of the extractor is then screwed on and the extractor pumped full of hot naphtha. In the bottom of the extractor is a closed coil of steam pipe. The steam is now turned into this and the naphtha vaporized. The hot naphtha vapor as it passes up through the garbage takes up the water vapor, just as hot air would do under the same circumstances. The mixed naphtha and water vapor is led off from the top of the extractor to a condenser formed by a coil of pipe over which cold water is kept flowing. The condensed water and naphtha pass to the "separator," where they separate in two layers, the naphtha floating on top. The naphtha is drawn off continuously to the naphtha tanks and the water passes off into the river, or could well be discharged into the sewer if there was one. From the naphtha tanks the naphtha is pumped directly to the extractors again, passing through a heater on its way. This heater is so arranged as to heat the cold naphtha by means of the hot naphtha vapor which comes from the extractors, thus forming a sort of secondary condenser and economizing both the heating of the naphtha and the cooling of the naphtha vapor. As the naphtha in the extractor is brought in contact with the garbage it dissolves out some of the grease. The naphtha vapor also, as it passes through the garbage, dissolves out the grease, which trickles down into the liquid beneath. As the evaporation continues, the level of the liquid in the extractor sinks lower and lower. It is a solution of grease and naphtha, which is constantly becoming more and more concentrated. When it is evaporated so that there is only a small amount in the bottom of the extractor, not reaching the level of the bottom of the carriages containing the garbage, it is forced off into the "settler." The extractor is then filled with naphtha again and the process repeated seven or eight times, until all the grease and water are removed. Open steam is then turned into the extractor and allowed to pass through the garbage for three or four hours, until every vestige of the naphtha is removed. This steam also, after leaving the extractor, passes through the condenser, so that every portion of naphtha that it removes from the garbage is saved. The evaporation of a charge of naphtha occupies about four hours, open steaming about the same, so that the whole time occupied in extracting the garbage is thirty-two to thirty-six hours. After the open steaming, the head of the extractor is removed and the charge drawn out and carried to another building, where the dried garbage is ground, sifted and bagged, ready to ship to fertilizer manufacturers. The amount of dried garbage, or tankage, which is obtained from an extractor, varies somewhat at different seasons of the year, but averages about a ton and a half. To return to the settler: this is a tall, upright, iron tank which receives the solution of grease and naphtha from the extractors and also a certain amount of water and dirt which comes with it. This latter is drawn out from the bottom and passes into the river, while the naphtha solution goes into the stills where the naphtha is driven off by distillation and open steaming, and the grease is then drawn off and is ready for shipment. The amount of grease also varies with the seasons, but will average about six hundred pounds to an extractor.

The works in Providence consist of a building in which are three boilers aggregating about 235 horse-power; here is also the engine and the grinding mill and the store-room for the tankage. Attached to this building is a shed where the garbage is unloaded from the teams and put on the carriages. The building where the naphtha process is conducted is entirely separate from this building, and is merely a frame covered with corrugated iron. In it are six extractors, two settlers, two stills, and the necessary pumps, tanks and piping. The condensing apparatus is outside, in order to get the advantage of cold air. The water for condensing is supplied by a large steam-pump, which is connected with four driven wells supplying about 250,000 gallons every twenty-four hours, at a temperature of 50 degrees, which is uniform throughout the year. The tanks for storing the naphtha are also in the open air. The works are run day and night with the exception of Sunday. The quantity of coal consumed is about forty-eight tons per week, or a little over two tons for each extractor full of garbage treated; therefore one ton of coal evaporates about three tons of water. There is a loss of naphtha in various ways, by leakage and evaporation, amounting to nearly 1,000 gallons a week.

The amount, value, and composition of garbage varies very greatly at different seasons of the year. The bulk is the largest in the summer, beginning to increase with the beginning of pea-pod time and reaching its maximum during the height of the green-corn season, at which time the total volume of the garbage is fifty per cent. greater than it is at the minimum. The smallest quantity is in spring and fall Vegetable material in garbage has little value as a fertilizer or for grease. In the winter time the bulk and weight of the garbage is, in the climate of Providence, increased considerably by snow and ice. The amount of garbage collected during the year is about 15,000 tons as it stands in the carts. As has been stated, about fifty per cent. of this drains out on the floor. Of the remainder, from seventy-five to eighty per cent. is water, from three to six per cent. grease, and the remainder—from fourteen to twenty-two per cent.—dry residue or tankage. The grease is very dark in color and can be used for any purpose for which dark grease is adapted. The tankage shows on analysis from five to twenty per cent. bone phosphate, from three to six per cent. ammonia, and a little over one per cent. potash. It is exceedingly dry, and is in great demand by fertilizer manufacturers for mixing with other ingredients.

There has been considerable complaint in regard to the nuisance caused by the works for the disposal of garbage just described. A part of this undoubtedly has some foundation in fact. The garbage as it drains upon the floor is undoubtedly a nuisance, though the smell from this is somewhat confined by the building and does not travel very far. In the construction of new works pockets would be provided similar to those used for grain or coal, in which the garbage would be at once received and tightly covered. If necessary these pockets could be ventilated under the fires. The other source of nuisance is from the leakage of naphtha vapor. As the naphtha is used over and over again it becomes saturated with odors derived from the garbage, and being very volatile, whenever a leak occurs the vapor is carried to a considerable distance. This source of nuisance I think could also be removed by having a different kind of condenser which would not leak.

REPORT OF THE SECRETARY

As a Delegate to the Ninth Annual Meeting of the National Conference of the State Boards of Health, held in New York City, April 5, 1893.

At the Ninth Annual Meeting of the State Board of Health, held in New York City in 1893, the following proposition was presented for discussion by the various delegates, representing the different states.

Proposition 7—

7. (*a*) What has been done by each State Board of Health to protect the territory under its jurisdiction against cholera?
(*b*) What quarantine powers has each Board?
(*c*) What are the present conditions in the principal cities and towns of each State?

In response to the call for report of the delegate from Rhode Island, Dr. Charles H. Fisher answered as follows:

Dr. Chas. H. Fisher.—Mr. Chairman, in regard to what has been done by the State Board as against the invasion of Cholera in my State: in reply to that question it would be as to whether it was recent action or action taken sometime since. Now, indirectly, in common with other diseases, and directly, as against Cholera especially, it has been the object of the Board during the 15 years of its existence to present and earnestly advocate the necessity of popular knowledge and practice of personal hygiene and general sanitation. We have published during the last five years a 16 to 22 page octavo monthly bulletin, which is to inculcate the principles of hygiene. This monthly bulletin is published voluntarily by the Board; there is no law requiring its publication. It was commenced with the design of disseminating among the people in connection with the Mortality Reports, the subject of hygiene in a popular manner, so that the people might gradually become acquainted with the principles of hygiene and personal sanitation in other directions. After the publication had been issued five or six months, the Legislature of the State passed a resolution that all Public School teachers of the State be supplied with these monthly bulletins gratis. There are now nearly 1200 school teachers in the State who receive regularly the monthly bulletin; it is also sent to the Health Officers of the State, to the members of the General Assembly also. We have been endeavoring to disseminate some popular knowledge in regard to hygiene, and to obtain action on the part of towns in regard to sanitary improvements, by appeals in person by the Secretary to Town Councils when in session. That has been done in a large number of instances. By law, every town has to appoint a health officer. The health officers report yearly what they have done. Now, as a result of these measures taken, there has been a slow but gradual advance in popular sentiment in relation to hygienic requirements. It has this result indirectly against Cholera as well as other diseases.

As to what has been done directly as against the introduction and prevalence of Cholera: during last August and September, and also during the Cholera excitement of several years ago, by newspaper articles and special circulars distributed to all members of the town councils and all the health authorities in the State, an account of the cause, nature of the disease, and necessary means of prevention and restriction were given, with earnest appeals for prompt action in the premises, which I am happy to say were not without gratifying results. So far as provision is made for the prevention of Cholera during the coming year, that perhaps will cover it. The Town Councils in several towns have by law been constituted Boards of Health; they are required to appoint a health officer, who has to report every forty-eight hours to the Town Council. There is but one regularly constituted Board of Health in the State, I mean separate from the Boards of Aldermen in the cities, and from the Town Councils in the several towns. In Rhode Island, as many know, there is a very strong feeling, especially in the native population, of retention of what they know as personal rights. The idea of Roger Williams that every person should have the right to the exercise of his liberty of conscience in all matters pertaining to religion, they carry in all matters pertaining to living, and they have been heretofore unwilling, that is the representatives in the Legislature acting for the towns have been unwilling, to lessen the complete authority that the Town Councils of the several towns have over all matters affecting the towns. But I can say so far as preparation to meet Cholera is concerned, that the Town Councils will be ready to act promptly, decidedly, and I think, efficiently, when the time comes. When we have had cases of small-pox or any other infectious disease that has been introduced into the towns. the health officers have looked after the matter at once; the Town Councils have come to their aid decidedly, so much so that they had some shotgun quarantine at Block Island last summer. So far as the action of the Board in regard to quarantine is concerned, we have no authority. In fact the Board in Rhode Island has no authority to compel any action whatever; it is entirely advisory, and so far I must admit it has been quite satisfactory. Town Councils have been willing in most instances to do what they were advised. In some instances I cannot say that they have always come up to the full measure of what was desired. We have no quarantine in active operation in Rhode Island, the Statutes of the State provide for a quarantine against vessels; those having infectious diseases on board, are required by the Statute to anchor not less than a mile from any landing place, and to run up the yellow flag. This has not always been complied with. There has been, since I have been Health Officer, one instance where a ship infected with Yellow Fever came into the waters of Narragansett Bay. I was telegraphed, but before I could reach the place the ship had left. The Statutes give to seaport towns, all those towns which border on Narragansett Bay and the ocean, authority to appoint health officers who may have complete authority or such authority as the towns may give, in bringing vessels to anchor and in preventing masters of the vessels from having any communication whatever with the shore except through an inspection officer, who is appointed by the town. Each seaport town can appoint a special officer, the official is not a quarantine but a health officer, for the purpose of visiting vessels. Last year during the Cholera scare a sentinel was appointed by Newport to challenge vessels coming up the Bay, and also by the city of Providence for the same purpose. These sentinels were continued in office for about ten weeks. The Legislature of Rhode Island is now in session; I am hoping as a result of the conclusions of this Conference that I may present to the Legislature some acts framed to meet more directly and promptly the possible necessities of the coming year. So far as the State has done anything in reference to Cholera I believe that covers the ground; and so far as the State Board has done anything I have given you all that occurs to me now in regard to that matter.

EXAMINATION OF ICE SUPPLIES.

During the year the secretary, Dr. Fisher, procured from various ice delivery wagons eleven samples of ice, which were delivered to Prof. John H. Appleton for chemical analysis. The facilities of the Board at this time did not include bacteriological analysis.

The samples were collected in one gallon, new tin pails which had been thoroughly boiled and wiped dry.

The samples were taken from the different wagons which came from the store-houses, and was selected somewhat at random.

The ice was cleaned on its surface and then put into the pails. The samples numbered up to ten were samples of natural ice, while that numbered eleven was a sample of ice artificially formed.

The results of the analyses is shown in the following report:

Chemical Laboratory of Brown University,
Providence, R. I., Sept. 17, 1892.

Chas. H. Fisher, M. D.,
Secretary State Board of Health.

Dear Sir:—I have carefully tested eleven samples of water derived from the melting of ice—the samples delivered to me by you. The numerical results I give in the table enclosed (1610a).

The sample most nearly free from ammoniacal nitrogen is No. 11. It is notable, however, for a relatively large amount of nitrogen in nitrates.

The worst sample is No. 6. I feel certain that the use of this sample would be detrimental to health.

Several of the samples, for example Nos. 3, 5, 8, are of fairly high quality as respects nitrogenous constituents.

Yours respectfully,

JOHN HOWARD APPLETON.

Chemical Laboratory of Brown University.

Memorandum of Water Analysis from Melted Ice by Prof. J. H. Appleton.

The larger figures signify parts (by weight) in one million parts of water, (by weight).

The smaller figures signify grains per American gallon of water, (weighing 58,372.2 grains).

	Albuminoid Ammonia.	Ready-formed Ammonia.	Nitrogen in Nitrates.	Nitrogen in Nitrites.
1. Clear; no odor; no sediment.	.26 .0152	.08 .0047	.10 .0058	0 ....
2. Clear; no odor; black sediment............	.20 .0116	.06 .0035	.10 .0058	0 ....
3. Turbid; no odor; yellow..................	.08 .0047	.08 .0047	.10 .0058	0 ....
4.	.24 .0140	.08 .0047	.10 .0058	trace ....
5. Slightly milky; no odor; much black sediment..................................	.07 .0041	.02 .0012	.10 .0058	0 ...
6. Slightly milky; very offensive odor; distillate smelled like urine...........	1.40 .0817	1.00 .0583	.10 .0058	.003 .0002
7.	.40 .0233	.22 .0128	not determined.	not determined.
8.	.16 .0093	.06 .0035	.14 .0081	0 ....
9. Clear; no odor; very slight sediment.......	.16 .0093	.06 .0035	.14 .0081	0 ....
10. Clear; no odor........	.08 .0047	.10 .0058	.10 .0058	0 ....
11. Clear; no odor; no sediment.	.03 .0018	.02 .0012	.60 .0350	.002 .0001

EXAMINATION OF WALL PAPERS AND WRAPPING PAPERS FOR ARSENIC.

As a result of the intimation of a considerable number of people that wall paper in their houses might be responsible for some of the ill health of the inmates, the Secretary, Dr. Fisher with assistance of Prof. Appleton procured twenty samples of wall paper which from their color might be suspected of containing arsenic.

Various colored wrapping papers had been previously analyzed with negative results.

The following report gives the results of the examination which shows that none of the twenty samples contained arsenic in any form.

CHEMICAL LABORATORY OF BROWN UNIVERSITY,
PROVIDENCE, R. I. Jan. 19, 1893.

CHARLES H. FISHER, M. D.,
Secretary of the Rhode Island State Board of Health.

DEAR SIR:—In accordance with your instructions I have examined twenty samples of wall-paper such as are offered for sale in the city of Providence. The papers were of various prices, colors and characters. Such were selected as might represent different purposes, that is, such as might be intended for parlors, dining-rooms, chambers, or other rooms in a dwelling. In the matter of color, such papers were chosen as might contain arsenic, for example, greens, reds, blues. Of course arsenic may be present in wall-paper irrespective of color. I believe that arsenic has been used as an antiseptic in the adhesive paste employed by the paper manufacturer as a medium to secure the adhesion of the pigment to the paper.

The samples I tested were American or French or English in origin. They were of different style of manufacture—thus: Some had "flocks," some were cartridge-paper, some of the so-called "sanitary" type, while some were of ordinary finish. The following table affords a general description of the samples tested:

Number.	Prevailing color.	Price per roll.	
1	Bronze	——	
2	Light green	.10	American.
3	Light green	.08	American.
4	Buff	.12	American.
5	Sulphur	——	
6	Orange	.35	
7	Salmon; grey flocks	1 00	
8	Terra-cotta	30	
9	Dull blue	60	
10	Corn and olive	.40	
11	Browns	1.50	French.
12	Dull greens	.60	English (Sanitary).
13	Light green vine	1.00	English.
14	Browns (yellow stock)	——	English (Sanitary).
15	Dull green	——	American.
16	Light brown	——	American.
17	Terra-cotta	.40	American.
18	Red	——	American.
19	Dull blue	.80	American.
20	Blue	——	

I think that an examination of the table and the samples of papers themselves (accompanying this report) will show that a fairly typical set of papers has been examined.

APPENDIX.

PUBLIC STATUTES

CHAPTER 83

OF THE STATE BOARD OF HEALTH.

SECTION 1. The governor with the advice and consent of the senate shall appoint six persons, two from the county of Providence and one from each of the other counties, who shall constitute the state board of health, one of whom shall be appointed in each year for the term of six years from the first day of July. Any appointment to fill a vacancy shall be for the remainder of the term. Of the persons so appointed, at least three shall be well educated physicians and members of some medical society incorporated by the state. The governor may remove any member for cause, at any time, upon the written request of two-thirds of the board.

SEC. 2. The board shall take cognizance of the interests of life and health among the citizens of the state; they shall make investigation into the causes of disease, and especially of epidemics and endemics among the people, the sources of mortality, and the effects of localities, employments, conditions and circumstances on the public health, and shall do all in their power to ascertain the causes and the best means for the prevention of diseases of every kind in the state. They shall publish and circulate, from time to time such information as they shall deem to be important and useful for diffusion among the people of the state, and shall investigate and give advice in relation to such subjects relating to the public health, as may be referred to them by the general assembly or by the governor when the general assembly is not in session.

SEC. 3. The state board of health shall also investigate the subject of diseases among cattle or other animals.

SEC. 4. The board shall meet in the city of Providence once in three months, and as much oftener as they may deem necessary. No member of the board, except the secretary, shall receive any compensation for his services; but the actual personal expenses of any member, while engaged in the duties of the board, shall be paid by the state.

Sec. 5. The board shall elect a well qualified physician as their secretary, who shall be *ex-officio* a member of the board, the commissioner of public health and state registrar, but he shall not be permitted to vote on any question in which he is personally interested or be entitled to any additional compensation for mileage or expenses.

Sec. 6. The secretary of the board shall make inquiry from time to time, of the clerks of town and local boards of health and practising physicians in relation to the prevalence of any disease, or knowledge of any known or generally believed source of disease or causes of general ill-health, and also in relation to the proceedings of the said boards of health; in respect of acts for the promotion and protection of the public health, and also in relation to diseases among domestic animals in their several towns; and the said clerks of town and local boards of health and said practising physicians shall give information, in reply to said inquiries, of such facts and circumstances as shall have come to their knowledge.

Sec. 7. The secretary shall perform and superintend the work prescribed for said board by law and such other duties as the board may require; he shall prepare and publish in every calendar month a general summary of all the deaths and causes of the same which had occurred in the state during the preceding month, the same to be made up from returns of deaths which shall be sent to him on or before the tenth day of the month following the date of such deaths, by the several town and city clerks and the city registrar of Providence city; he shall also prepare and publish for general distribution a monthly circular giving information and advice in regard to the preservation of health, suitable for each particular season, and giving also such information as he shall deem of advantage to the public, as to the prevalence and character of infectious diseases of domestic animals, and for such service he shall receive the sum of seventeen hundred dollars annually, or such proportion thereof as the said board may determine. He shall hold his office during the pleasure of the board and may be removed at any regular meeting by a majority vote of the members of said board.

Sec. 8. The governor shall provide a suitable office for the board in the city of Providence, and the actual expenses of the board and of the members thereof, when certified by the chairman and approved by the governor shall be paid from the state treasury.

Sec. 9. The board shall make a report in print to the general assembly, annually, of its proceedings during the year ending on the thirty-first day of December next preceding, with such suggestions in relation to the sanitary laws and interests of the state as they shall deem important.

ADDITIONS TO THE LIBRARY.

1893.

BOOK EXCHANGES.

Maine	Annual Report	of the	State Board	of Health,	1892
New Hampshire	“	“	“	“	1892
Massachusetts	“	“	“	“	1892
Connecticut	“	“	“	“	1892
New York	“	“	“	“	1892
New Jersey	“	“	“	“	1892
Pennsylvania	“	“	“	“	1892
Delaware—Biennial	“	“	“	“	1890-1892
Maryland—Annual	“	“	“	“	1892
West Virginia—Biennial	“	“	“	“	1890-1892
Florida—Annual	“	“	“	“	1892
Alabama	“	“	“	“	1892

United States Vol. III., Weekly Abstracts of Sanitary Reports, 1892.
“ Weekly Abstracts of Sanitary Reports, 1893.
“ Seventh Annual Report of Commissioner of Labor, 1891.
“ Report of Surgeon-General of Army to Secretary of War, 1892-1893.
“ Bulletins of N. E. Weather Service, 1893.
“ Index Catalogue Library, Surgeon-General's office, Vol. XIV, 1893.
“ Bureau of Education, “Abnormal Man,” 1893.
“ Treasury Department, U. S. Quarantine Laws and Regulations, 1893.
“ Treasury Department, Maritime Quarantine, 1893.
“ Department of Agriculture, Foods and Food Adulterants, 1893.
“ “ “ Eighth Annual Report of Bureau of Animal Industry, 1891.

United States, Department of Agriculture, Ninth Annual Report of Bureau of Animal Industry, 1892.
“ “ “ “Treatment of Lumpy-Jaw,” 1893.
“ “ “ Contributions from National Herbarium, 1893.
“ “ “ Grasses of the Pacific Slope, (Part II) 1893.
“ “ “ “Texas Fever,” 1893
“ “ “ Album of Agricultural Statistics, 1892.
“ “ “ Record of Experience with Sorghum in 1891, 1893.
“ “ “ Special Report on the Extent and Character of Food Adulterants, 1892.
“ “ “ Experiments with Sugar Beets in 1891, 1893.

Rhode Island. School Reports, 1892.
“ Sixth Report of Industrial Statistics, 1891.
“ Report of Railroad Commissioner, 1892.
“ Report of the State Auditor, 1892.
“ Report of Superintendent of Health of Providence, 1892.
“ Report of the City Registrar of Providence, 1892.
“ Quarterly Report of Board of Public Works of Providence, 1893.
“ Report of Board of State Charities and Corrections, 1892.
“ Report of State Board of Agriculture, 1892.
“ Report of General Treasurer, January Session, 1892.
“ Report of License Commissioners of Providence, January Session, 1892.
“ Report of Commissioners of Shell Fisheries, January Session, 1892.
“ Report of Board of State Valuation, January Session, 1892.
“ Report of State Board of Pharmacy, January Session, 1892.
“ Report of Board of Managers, R. I. College of Agriculture and Mechanic Arts, 1893.
“ Public Laws, 1888-1893, 1888-1893.
“ Message of D. R. Brown, Governor, 1893.

Massachusetts. Annual Report of Statistics of Manufactures, 1892.
“ Annual Report of Statistics of Labor, 1892.

New York. Local Boards of Health, 1892.

Pennsylvania. An Address Before the State Board of Health of Pennsylvania by S. G. Dixon, M. D., 1893.

Michigan. Proceedings and Addresses at Sanitary Convention, Hillsdale, Mich , 1893.

" Proceedings and Addresses at Sanitary Convention, Stanton, Mich., 1893.

Nebraska. Sixth Annual Report of the Agricultural Experiment Station, 1892.

Canada. Mortuary Statistics, 1891.

Germany. Statistischen Amts der Stadt, 1891.

Russia. Statistisk Arsbok for Finland, 1892.

Medical Directory for New England, 1892.

Transactions. New York Academy of Medicine, Vol. VIII, 1892.

Proceedings, Conference, State and Provincial Boards of Health, United States and Canada, 1892.

Proceedings, Sixth State Sanitary Convention, Erie, Penn., 1892.

Transactions of American Society of Civil Engineers, 1891.

" on the Hydraulics of Hemlock Lake Conduits of Rochester, N. Y. Water Works. G. W. Rafter, 1892.

" on Measures for Restricting the Use and Waste of Water in Force in Rochester. G. W. Rafter, 1892.

" on Some Recent Advances in Water Analyses and Use of Microscope for Detection of Sewage Contamination. George W. Rafter, 1893.

Report of the Committee on School Hygiene. D. F. Lincoln, Chairman, 1892.

Disposal of the Garbage and Waste of the World's Columbian Exposition. W. F. Morse, 1893.

Self Purification of Flowing Water and Inf. Poll Water in Causation of Diseases. G. S. Currier, M. D., 1892.

Unilateral Laryngectomy. G. H. Monks, M. D., 1893.

Vermont. 28th, 29th, 31st, 33d, 34th, 35th Registration Reports.

Massachusetts. Registration Report, 1892.

Michigan. 18th 19th, 24th, 25th Registration Reports to 1891.

Minnesota. Biennial Report of Vital Statistics, 1890-1891.

Canada. Report of the Registrar-General, Ontario, 1891.

Ireland. 29th Annual Report of Registrar-General, Ireland, 1892.

Jahrenbericht, Pathogenen Mikroorganismen. Brunswick, 1892.

Cases of Abdominal Surgery. Scudder, 1892-1893.

Census of Canada, 1892.

Zymotic Diseases of Chicago, etc., 1892.

Laws Relating to Public Health of Colorado, 1893.

Preliminary Report of Investigation Conducted by the State Board of Health of New Hampshire, 1893.

Report of the Sewerage Committee of Canton, Ohio, 1893.

The Sterilization of Milk, etc. Drs. Popp and Becker, 1893.

Proceeding of State Sanitary Convention, of California, 1892.

Transactions of Medical and Chirurgical Faculty of Maryland, 1892.

Report of a Recent Inspection of One of the Sources of Croton Water Supply, 1892.

Report of the Water Committee of Pawtucket, 1892.

Annual Report of the Sewer Committee of Pawtucket, 1892.

The Treatment of Hernia. Alexander Dallas, M. D., 1893.

Rules for the Government of the State Quarantine Board, Penn., 1893.

Quarantine Laws of State of Massachusetts and City of New Bedford, 1893.

Catalogue of New Jersey State Board of Health, 1893.

" of Yale University, Department of Medicine, 1893.

" of Bellevue Hospital, 1893.

" Medical School of Harvard University, 1893.

" College of Physicians and Surgeons, Columbia College, 1893.

" University of Maryland, School of Medicine, 1893.

" Brown University, 1892-1893.

ANNUAL REPORTS AND VITAL STATISTICS OF CITIES AND CITY BOARDS OF HEALTH.

Borough of Asbury Park; Berlin, Germany; Cambridge, Mass.; Chicago, Ill.; Hartford, Conn.; Lowell, Mass; Manchester, N. H.; Mansfield, Ohio; New Haven, Conn.; Newport, R. I.; Ontario, Can.; Portland, Me.; Providence, R. I.; Reading, Pa.; St. Paul, Minn.

REPORTS OF INSTITUTIONS AND SOCIETIES.

Athenæum, R. I. Historical Society, Providence Public Library, Redwood Library, State Manual, City Manual.

CIRCULARS, WEEKLY AND MONTHLY, BULLETINS, QUARTERLY REPORTS, ETC.

State Boards of Health of Maine, New Hampshire, Massachusetts, Connecticut, New York, Pennsylvania, North Carolina, Tenneessee, Michigan. Ohio, Wisconsin, Iowa, Minnesota, California, Louisiana, Florida. City Boards of

Health of New Haven, Conn.; St. Paul, Minn.; Brooklyn, N. Y.; Portland, Me.; Manchester, N. H.; Newport, R. I.; Boston, Mass.; Berlin, Germany; Cornwall County Council, England; Scotland, Italy.

PERIODICAL EXCHANGES.

The Sanitarian	Brooklyn, N. Y.
The Popular Science News	New York, N. Y.
Architecture and Building	" "
Manufacturer and Builder	" "
The American Analyst	" "
The Dietetic and Hygienic Gazette	" "
The Doctor of Hygiene	" "
The Medical Bulletin	Philadelphia, Pa.
Therapeutic Gazette	" "
The Journal of the American Medical Association	Chicago, Ill.
The Open Court	" "
American Climates and Resorts	" "
The New England Medical Gazette	Boston, Mass.
The Reflector	" "
The Texas Sanitarian	Austin, Texas.
The Industrialist	Manhattan, Kan.
Independent Citizen	Providence, R. I.
R. I. Medical Science Monthly	" "

INDEX.

	PAGE.
Alaska Spring	107
Annual Reports of Medical Correspondents	23-38
" " Town Clerks	39-79
" " Health Officers	81-126
Appleton, Prof. J. H.	104
Arsenic in Wall Paper	2,162
Asiatic Cholera	4
Arnold, Dr. H.	123
Arctic Spring	107
Barometer, readings of, 1881-1893	129-134
Beech Tree Spring	108
Births, 1893	135
Birth rates, 12 years	137
Board, meetings of	1
" members of	ii
Bulletin, Monthly	7
Carpenter, Dr. E. G.	87
Chandler, Abbott	89
Champlin, L. A.	124
Chapin, C. V., Superintendent of Health of Providence City	91, 145, 165
Cholera, Asiatic, Quarantine Regulations	4 145
Cholera Infantum*	139
Church, N. K.	124
Crystal Spring	108
Cloud, amount of, 1892	129
Consumption, comparative mortality	142
Conroy, M. B.	87

---

* See Index to Fortieth Registration Report. Part II of this Report.

PAGE.
Contagious Diseases 91
Darling Edwin, Superintendent's Report 66
Deaths, 1893 136
" Eighteen, principal cause for 38 years, Diagram 142
" Proportionate of prominent causes, 1893 137
Death rates, 12 years 137
Diamond Spring 109
Diarrhœa* 139–140
Diphtheria* 92, 97
Diseases, comparative prevalence of thirteen principal, 1893 138
Disinfection 99
Dysentery* 140
Eureka Spring 109
Fever Intermittent* 140
" Typhoid* 140
Filter Beds for Sewage 68
Filtration, Mechanical 163
Filtration of Pawtuxet water 102
Filtration of Public water supplies—Dr. C. V. Chapin 145
Fisher, Dr. Charles H., Death of 1, 5
" " " Report as Delegate 171
Garbage, Disposal of—Dr. C. V. Chapin 165
Gould, F. 124
Greene, J. B. 90
Granite Spring 110
Harris, Dr. G. A. 123
Harvey, W. T. 125
Haines, Dr. G. B. 122
Hazard Cold Spring 110
Health in the State, 1892 7–15
" " Towns 17–38
Health, officers of, in Rhode Island, reports of 81–126
Hermit Spring 110
Hillside Spring 111
Humidity, monthly means of, 1881–1893 129–133
Ice, Artificial 117, 174
Ice, Examinations of 118, 174

---

* See Index to Fortieth Registration Report.

PAGE.
Influenza*. 140
Intermittent fever*. 140
King, Dr. D. O. 122
Kinnecom, S. E. 90
King Philip Spring. 111
Langworthy, G. A. 124
Littlefield, Alonzo 125
Library, additions to 181
Malarial diseases*. 140
Malo, Dr. N. 90
Manitoba Spring 112
Maranda, J. C. 122
Marriages, 1893. 136
Marriage rates, 12 years 137
Meteorology—Tables. 127–134
Molten, Mr. J. C. 122
National Conference State Board of Health 171
Nobscot Mountain Spring 112
Ochee Spring 112
Ordinances, new 45 46, 48, 50, 51, 53, 54, 56, 63, 64, 101
Paine, Dr. R. M 122
Parks, public. 76
Pawtucket Water Commission, extracts from report of Superintendent. 66–68
Pawtuxet water, analyses of 104–106
" " Filtration of 102
Peck, Geo. H 86
Pierce, Dr. A. C 86
Peckham, J 125
Plumbing Law, Providence. 101
Pneumonia* 140
Provisions, Inspector of. 102
Premium Spring. 113
Prophet Spring 114
Quinn, Thomas. 122
Quarantine. 2
" Act in Relation to 3
Rainfall—Pawtucket. 67

---

* See Index to Fortieth Registration Report.

PAGE.

- Rainfall, 1881–1893—Providence 141–147
- Registration Report 135
- Reports for 1893.
  - Annual of physicians 19
  - Annual of town clerks 41
  - Medical correspondents, annual 19
  - Of Doctors: Arnold, B. and C. E. C. 34
    - Baldwin, Mary E. 30
    - Briggs, A. B. 44
    - Canfield, W. C. 25
    - Carpenter, E. G. 28
    - Chapin, C. V 91
    - Clark, E. P. 36
    - Earle, Chas. H 29
    - Fuller, F. B. 32
    - Harris, G. A. 32
    - Haines, G. B. 33
    - Kelliher, M. W 33
    - Maranda, J. C. 35
    - Maryott, C. E. 36
    - Metcalf, H 37
    - Moore, E. E. 31
    - News, Annie 31
    - Perry, J. E. 37
    - Pierce, A. C. 26
    - Redfield, P. S. 34
    - Saunders, A. A 38
    - Smith, F. B. 27
    - Sprague, A. G. 30, 88
    - Williams, W. Fred 24
    - Winsor, John 27
- Reports from towns for 1893 24–133
  - Town clerks (clerks of local boards of health) 41–79
    - Allen, E. R. 78
    - Angell, T. H 64
    - Bennett, H. F. 44
    - Brownell, F. R. 48
    - Caswell, W. F. 47
    - Caswell, W. H 78

PAGE.

Reports of town clerks—Continued.
- Chase, A. L. 49
- Champlin, E. P. 51
- Clark, J. F 54
- Clarke, H. P. 78
- Cook, J. T. 49
- Crombe, C. T. 78
- Cross, G. C. 77
- Edwards, J. H. 77
- Farnum, C. W. 62
- Gough, Joseph 62
- Griffin, S. W 45
- Hoxsey, W. 79
- Hunter, G. F. 57
- Lockwood, J. T. 46
- Lyon, E. D 62
- Mason, C. B. 44
- Mason, W. C 77
- Perry, H. B 78
- Remington, D. H. 61
- Stevens, W. G. 50
- Steere, J. S. 53
- Sweet, W. N. 45
- Tobey, O. A. 61, 77
- Waterman, D. D. 53
- Wood, Mark H. 41

Reynolds, S. E. 124
Rock Spring. 114
Richmond, A. C. 87
Sachem Spring. 114
Scarlatina* 4, 92, 93, 140
Sewerage. . . . .
- " Providence 75
- " Pawtucket. 68

Sewage Disposal. 68, 75
Shaw, Geo. C. 125
Small Pox 88

---

* See Index to Fortieth Registration Report.

PAGE.
Smith, Jenckes 121
Smith, S. B. 121
Spring Waters 106–117
Swill, removal of 100
Sockanosset Spring 115
State Board of Health, Statute Law 179
Stanley, Dr. G. H. 90
Stellman, Dr. H. L. 124
Temperature, 1881–1893 129–133
Towns, reports from, 1893.
  Barrington 25, 44, 86
  Bristol 24, 44, 86
  Burrillville 31, 51, 122
  Charlestown 37, 77, 124
  Coventry 26, 27, 45, 87
  Cumberland 53, 122
  Cranston 53, 122
  Drownville 25
  East Greenwich 27, 28, 45, 87
  East Providence 31, 54, 123
  Exeter 77, 124
  Foster 62, 123
  Glocester 31, 62, 123
  Hope Valley 35
  Hopkinton 78, 124
  Jamestown 46, 89
  Johnston 62, 90
  Lincoln 33, 62
  Little Compton 47, 125
  Middletown 48, 125
  Narragansett, District of 78, 124
  North Providence 64
  North Smithfield 64, 90
  North Kingstown 36, 37, 124
  Newport City 30, 49, 125
  New Shoreham 50, 125
  North Providence 90
  Portsmouth 49, 125
  Pawtucket 32, 66, 90

PAGE.

Towns, reports from, 1893—Continued.
    Providence City.... 71, 91
    Richmond.... 37, 78, 124
    Scituate.... 34, 64, 76, 121
    Smithfield.... 64, 77, 121
    South Kingstown.... 37, 78, 124
    Tiverton.... 49, 126
    Valley Falls.... 33
    Warren.... 25, 44, 87
    Warwick.... 29, 45, 88
    West Greenwich.... 45, 88
    Westerly.... 79, 25
    Woonsocket.... 34, 77, 122
Town Sanitation.... 39-79
Tripp, Green.... 126
Twin Oak Spring.... 115
Typhoid Fever*.... 93-140
Typhus Fever.... 98
Vaccination.... 99
Varioloid.... 88
Vital Statistics.... 119
Wall Papers, arsenic in.... 2, 162
Water analyses.... 104
Water, Pawtuxet, Pollution of.... 71
    Aeration of.... 154
Water, Filtration of.... 145, 156
    Sedimentation of.... 155
    Storage of.... 153
Water Works....
    " East Providence.... 57
    " Lincoln.... 90
    " Pawtucket.... 57, 66
    " Providence City.... 72
Watchemoket Fire District.... 57, 61
Waters, John W.... 90
Wilcox, Ethan.... 125
Winds, direction and velocity of, 1881-1893.... 129-133
Wood, M. B.... 123

---

* See Index to Fortieth Registration Report.

FORTIETH REPORT

RELATING TO THE

REGISTRY AND RETURN

OF

Births, Marriages and Deaths,

AND OF DIVORCE,

IN THE

STATE OF RHODE ISLAND

FOR THE

YEAR ENDING DECEMBER 31, 1892.

PREPARED BY

CHARLES H. FISHER, M. D.,

AND

GARDNER T. SWARTS, M. D.

PROVIDENCE:
E. L. FREEMAN & SON, STATE PRINTERS.
1893.

MEMBERS

OF THE

RHODE ISLAND STATE BOARD OF HEALTH.

	Post Office Address.	
ALBERT G. SPRAGUE, M. D., *President*	River Point	Kent County.
SAMUEL M. GRAY, C. E.	Providence	Providence Co.
PAUL S. REDFIELD, M. D	Providence	Providence Co.
REV. GEORGE L. LOCKE	Bristol	Bristol County.
ALEXANDER B. BRIGGS, M. D	Ashaway	Washington Co.
PETER F. CURLEY, M. D.	Newport	Newport County.
GARDNER T. SWARTS, M. D	Providence	Providence Co.

GARDNER T. SWARTS, *Secretary.*

State of Rhode Island and Providence Plantations.

OFFICE OF THE STATE REGISTRAR OF VITAL STATISTICS.

PROVIDENCE, February 15, 1894.

To the Honorable General Assembly:

The Fortieth Annual Report upon the Registration of Births, Marriages and Deaths in Rhode Island, and including judicial procedures in relation to divorce, during the year 1892, with compendiary Tables of the results of registration in previous years, is herewith respectfully submitted.

The work upon this report was commenced by Dr. Charles H. Fisher, Secretary of the State Board of Health of Rhode Island. Owing to his sudden death in the Fall of 1893 the work was left unfinished, and was completed by his successor in office.

Dr. Fisher had been Registrar of Vital Statistics of the State of Rhode Island since 1878, when the Twenty-Sixth Annual Registration Report of the State was issued by him, and had since then labored to make this report as perfect and complete as the data supplied would permit, and the methods of registration reports of other States and countries would suggest.

In this report of 1892 he had completed the fundamental Tables I to XII, inclusive, although it had not all been placed in print.

From this point his successor has carried the work to completion. The endeavor has been to follow as closely as possible the form of presentation which Dr. Fisher had already mapped out, and which during the past fifteen years of the issuance of this report, by him, has given them the high standing with the reports of other States and countries which it so justly deserves.

The plan of preceding years, in regard to the general arrangement of the Tables, summaries and comments, has been followed in this report, with some additional Tables, and a few special changes made to meet certain requirements.

In the special Tables the object has been to present the important facts of many years of registration, as well as of single years, in such manner as to make them readily apparent, and relieve the reader of the statistics of much of the labor of personal examination of each of the general Tables of the preceding reports, for the purpose of ascertaining the relation the various facts bear to each other.

With great respect,

GARDNER T. SWARTS,

State Registrar.

CONTENTS.

See INDEX, *page* 269.

GENERAL TABLES.

TABLE I. General summary of the births, marriages and deaths, in 1892, in each town and each county in the State, showing the number of births, the sex and parentage of those born; the number of marriages, with the nativity of those married; the number of deaths, with the sex and parentage of those who died; the aggregate and average age of the decedents of each sex, and of the whole number of decedents whose age was given 2–5

TABLE II. Births; showing the number of each sex born in each month of the year, in the several divisions of the State 6–7

TABLE III. Plurality births; arranged by months, sexes and divisions of the State, and showing the nativity of the parents 8

TABLE IV. Marriages; the number in each month, and in each quarter of the year, in the several divisions of the State 9

TABLE V. Deaths; showing the number of decedents of each sex in each month, in the several divisions of the State 10–11

TABLE VI. Deaths; showing the number of each sex that died at certain stated periods of life, in each town and division of the State; also the population of every town and division, with the percentage of deaths to population 12–17

TABLE VII. Causes of death, and season, in 1892; arranged alphabetically, showing the number of decedents of each sex from each cause, in each month and in the whole year, and also the number of native and of foreign parentage for the whole year 18–29

TABLE VIII. Causes of death and age; arranged alphabetically, and showing the number of decedents of each sex from each cause, in each period of life 30–41

TABLE IX. Classification and percentage; showing the number and percentage of deaths from each cause and in each class of causes, in the whole State, and in each division of the State 42–49

TABLE X. Nosological classification of causes of death in Rhode Island, in each of the forty years, 1853-1892 50–65

TABLE XI. Occupations and ages at death; showing the number and the aggregate and average age at death of the decedents, in each occupation and class of occupations, in the whole State, for 37 years, ages under 20 omitted 66–76

TABLE XII. Occupations and causes of death; showing the number in each occupation and class of occupations, who died by each specified cause, during 1892, omitting ages under 20 77–91

TABLE XII. Supplementary 92–93

SPECIAL TABLES, RESULTS AND COMMENTS.

Births, Marriages and deaths. Tables XIII–XVI 97–106
Diagram I. Birth-Rates 108
BIRTHS. Special Results. Tables XVII–XXX 111–127
MARRIAGES. Special Results. Tables XXXI–XLIII 128–141
DIVORCES. Tables XLIV–XLV 143–147
" Ratio of to marriage, different States. Table XLVI 148
DEATHS. Special Results. Tables XLVII–XCIV 149–243
Diagram II. Death-Rates 164
Diagram III. " " 245
Nomenclature of Diseases. Appendix 248–255
Suggestions Concerning Physicians' Certificates of Death. 256
Laws in Relation to Vital Statistics 259
Synopsis of the Law of Marriage. 263
Laws in Relation to Divorce 265
Index. 269

REPORT UPON THE REGISTRATION

OF

BIRTHS, MARRIAGES AND DEATHS

IN

RHODE ISLAND,

FOR THE

YEAR ENDING DEC. 31, 1892,

AND

FOR VARIOUS PERIODS FROM 1853 TO 1892 INCLUSIVE.

TABLE I.

General Summary of Births and Marriages in the State of Rhode Island during the year 1892.

TOWNS AND DIVISIONS OF THE STATE.	BIRTHS.							MARRIAGES.				
		Sex.		PARENTAGE.					NATIVITY.			
	Whole Number.	Males.	Females.	Native.	Foreign.	Native Father. For. Mother.	For. Father. Native Mo.	Whole Number.	Native.	Foreign.	Native Groom. Foreign Bride.	For. Groom. Native Bride.
Barrington	18	11	7	11	5	2	....	5	4	1	...	....
Bristol	93	55	38	45	38	5	5	48	36	7	1	4
Warren	87	42	45	24	49	7	7	36	15	15	2	4
BRISTOL COUNTY	198	108	90	80	92	14	12	89	55	23	3	8
Coventry	93	52	41	31	47	8	7	31	26	1	1	3
East Greenwich	82	44	38	49	22	6	5	33	19	8	5	1
West Greenwich	10	7	3	7	1	1	1	......	......	.....	....	....
Warwick	480	233	247	120	271	48	41	171	53	73	21	24
KENT COUNTY	665	336	329	207	341	63	54	235	98	82	27	28
Jamestown	20	8	12	15	3	1	1	6	6	.....	....	...
Little Compton	7	1	6	6	......	...	1	8	7	.....	....	1
Middletown	37	16	21	17	17	2	1	13	10	......	1	2
NEWPORT CITY	488	247	241	208	188	45	47	151	69	52	11	19
New Shoreham	29	22	7	28	......	1	....	11	10	......	1	....
Portsmouth	25	16	9	18	3	2	2	14	13	1	....	....
Tiverton	72	33	39	28	32	9	3	30	24	1	2	3
NEWPORT COUNTY	678	343	335	320	243	60	55	233	139	54	15	25
Burrillville	108	54	54	34	40	13	21	50	24	11	7	8
Cranston	159	68	91	74	61	15	9	38	23	6	3	6
Cumberland	208	123	85	38	121	25	24	93	21	39	16	17
East Providence	203	115	88	119	47	18	19	67	41	12	8	6
Foster	12	7	5	12	......	...	....	19	19	......	...	...
Glocester	43	25	18	19	14	2	8	7	5	2	...	....
Johnston	290	149	141	79	167	21	23	64	27	22	6	9
Lincoln	701	371	330	118	449	56	78	170	51	80	19	20
North Providence	30	12	18	11	10	3	6	7	5	......	1	1
North Smithfield	74	42	32	22	37	6	9	25	7	13	2	3
PAWTUCKET	726	398	328	257	292	85	92	331	138	119	44	30
PROVIDENCE CITY	3,953	1,977	1,976	1,262	1,925	403	363	1,592	749	522	153	168
Scituate	74	36	38	60	6	4	4	42	39	1	2	...
Smithfield	28	12	16	11	11	1	5	22	10	6	3	3
WOONSOCKET	713	387	326	134	453	56	70	220	65	90	23	42
PROVIDENCE COUNTY	7,322	3,776	3,546	2,250	3,633	708	731	2,747	1,224	923	287	313
Charlestown	9	3	6	8	1	...	...	5	4	......	....	1
Exeter	11	7	4	11	.....	...	...	12	12	......	....	....
Hopkinton	51	25	26	42	3	3	3	31	28	......	1	2
Narragansett	21	13	8	11	4	4	2	6	5	......	1	...
North Kingstown	61	30	31	41	12	4	4	28	24	......	2	2
South Kingstown	88	41	47	76	2	7	3	40	35	1	4	....
Richmond	34	25	9	27	5	....	2	12	10	.....	1	1
Westerly	132	58	74	50	60	12	10	64	38	17	2	7
WASHINGTON COUNTY	407	202	205	266	87	30	24	198	156	18	11	13

TABLE I.—Continued.

General Summary of Deaths, in the State of Rhode Island, during the year 1892.

DEATHS.

Whole Number.	SEX.		PARENTAGE.		Ages Given.		Aggregate Age in Years.		Average Age in Years.		Aggregate Ages.	Average Age.
	Males.	Females.	Native.	Foreign.	Males.	Females.	Males.	Females.	Males.	Females.		
25	9	16	20	5	9	16	472	884	52.44	55.25	1,356	54.24
102	53	49	62	40	53	48	2,379	2,276	44.89	47.42	4,655	46.09
105	57	48	36	69	57	48	1,730	1,936	30.35	40.32	3,666	34.91
232	119	113	118	114	119	112	4,581	5,096	38.50	45.50	9,677	41.89
131	62	69	113	18	62	69	2,411	3,028	38.89	43.88	5,439	41.51
72	31	41	47	25	31	41	1,356	1,655	43.74	40.04	3,011	41.82
11	7	7	14	....	7	7	405	369	57.85	52.71	774	55.29
381	194	187	184	247	194	187	5,380	6,218	27.73	33.25	11,598	30.44
598	294	304	308	290	294	304	9,552	11,270	32.49	37.07	20,822	34.81
18	9	9	16	2	8	9	431	349	53.89	38.78	780	45.88
23	13	10	23	....	13	10	881	596	67.76	59.60	1,477	64.22
24	17	7	15	9	17	7	537	305	31.59	43.57	842	35.08
404	202	202	210	194	202	202	7,495	7,714	37.10	38.19	15,209	37.65
35	19	16	33	2	19	16	782	944	41.16	59.00	1,726	49.31
28	14	14	26	2	13	14	696	909	53.54	64.93	1,605	59.26
59	28	31	32	27	28	31	1,132	1,006	40.43	32.45	2,138	36.23
591	302	289	355	236	300	289	11,954	11,823	39.85	40.91	23,777	40.37
110	57	53	41	69	57	53	1,764	2,083	30.95	39.30	3,847	34.97
125	62	63	69	56	62	63	2,346	2,236	37.84	35.49	4,582	36.66
174	102	72	54	120	102	72	3,195	2,823	31.32	39.21	6,018	34.59
159	83	76	99	60	82	76	3,191	3,110	38.90	40.92	6,301	39.88
23	8	15	23	....	8	15	637	784	79.63	52.27	1,421	61.78
50	24	26	38	12	24	26	1,252	1,587	60.50	61.04	2,839	56.78
131	68	63	35	96	66	62	1,811	2,112	27.44	34.06	3,923	30.65
450	246	204	100	350	241	203	5,451	5,165	22.62	25.44	10,616	23.91
43	16	27	15	28	16	27	323	1,120	21.88	41.48	1,443	33.56
41	21	20	15	26	21	20	629	847	29.95	42.35	1,476	36.00
642	302	340	238	404	302	337	9,662	12,991	31.99	38.55	22,653	35.44
2,964	1,506	1,458	1,177	1,787	1,506	1,458	47,195	53,952	31.33	37.00	101,147	34.13
64	31	33	55	9	31	33	1,646	1,402	53.10	42.48	3,048	47.63
53	28	25	31	22	28	25	1,092	992	39.00	39.68	2,084	39.32
445	216	229	85	360	215	229	5,262	5,858	24.47	25.58	11,120	25.05
5,474	2,770	2,704	2,075	3,399	2,761	2,699	85,456	97,062	30.95	35.96	182,518	33.43
19	7	12	18	1	7	12	436	629	62.29	52.42	1,065	56.05
19	11	8	19	....	11	8	418	336	38.00	42.00	754	39.68
59	29	30	55	4	29	30	1,573	1,573	54.24	52.43	3,146	53.33
11	7	4	11	....	7	4	270	157	38.57	39.25	427	38.82
60	32	28	53	7	32	28	1,744	1,456	54.50	52.00	3,200	53.33
71	29	42	62	9	28	42	1,298	2,075	46.36	49.40	3,373	48.19
32	15	17	32	....	15	17	372	847	24.80	49.82	1,219	38.09
97	44	53	57	40	44	52	1,807	2,476	41.07	47.62	4,283	44.61
368	174	194	307	61	173	193	7,918	9,549	45.77	49.48	17,467	47.72

TABLE I.—Continued.—(RECAPITULATION.)

General Summary of Births and Marriages in the State of Rhode Island during the year 1892.

COUNTIES.	BIRTHS.							MARRIAGES.				
	Whole Number.	Sex.		PARENTAGE.				Whole Number.	NATIVITY.			
		Males.	Females.	Native.	Foreign.	Native Father. For. Mother.	For. Father. Native Mo.		Native.	Foreign.	Native Groom. Foreign Bride.	For. Groom. Native Bride.
BRISTOL	198	108	90	80	92	14	12	89	55	23	3	8
KENT	665	336	329	207	341	63	54	235	98	82	27	28
NEWPORT	678	343	335	320	243	60	55	233	139	54	15	25
PROVIDENCE	7,322	3,776	3,546	2,250	3,633	708	731	2,747	1,224	923	287	313
WASHINGTON	407	202	205	266	87	30	24	198	156	18	11	13
WHOLE STATE	9,270	4,765	4,505	3,123	4,396	875	876	3,502	1,672	1,100	343	387

TABLE I.—Continued.—(RECAPITULATION.)

General Summary of Deaths, in the State of Rhode Island, by Counties, during the year 1892.

DEATHS.												
Whole Number.	SEX.		PARENTAGE.		Ages Given.		Aggregate Age in Years		Average Age in Years.		Aggregate Ages.	Average Age.
	Males.	Females.	Native.	Foreign.	Males.	Females.	Males.	Females.	Males.	Females.		
232	119	113	118	114	119	112	4,581	5,096	38.50	45.50	9,677	41.89
598	294	304	308	290	294	304	9,552	11,270	32.49	37.07	20,822	34.81
591	302	289	355	236	300	289	11,954	11,823	39.85	40.91	23,777	40.37
3,474	2,770	2,704	2,075	3,399	2,761	2,699	85,456	97,062	30.95	35.96	182,518	33.43
368	174	194	307	61	173	193	7,918	9,549	45.77	49.48	17,467	47.72
133	67	67	53	80	66	67	2,932	3,514	44.42	52.45	6,446	48.47
7,396	3,725	3,671	3,216	4,180	3,713	3,664	122,393	138,314	32.96	37.75	260,707	35.34

TABLE II.—BIRTHS, 1892.

Arranged by Months, Sexes, and Divisions of the State.

MONTHS.	SEX.	Whole State.	DIVISIONS OF THE STATE.								
			Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Providence City.	Pawtucket.	Woonsocket.	Washington County.
January....	Males....	406	14	23	7	37	82	155	41	34	13
	Females..	365	7	15	14	22	73	166	28	26	14
	Total....	771	21	38	21	59	155	321	69	60	27
February...	Males....	332	9	25	7	8	70	154	22	29	8
	Females..	348	5	29	3	20	60	164	22	29	16
	Total....	680	14	54	10	28	130	318	44	58	24
March.....	Males....	401	4	26	5	17	84	167	34	45	19
	Females..	381	11	25	8	18	88	157	25	31	18
	Total..	782	15	51	13	35	172	324	59	76	37
April......	Males....	366	8	28	8	20	73	159	35	22	13
	Females..	325	7	34	1	12	71	149	20	15	16
	Total....	691	15	62	9	32	144	308	55	37	29
May.......	Males....	373	3	29	13	21	79	156	28	25	19
	Females..	397	8	30	10	17	81	174	20	37	20
	Total....	770	11	59	23	38	160	330	48	62	39
June.......	Males....	362	6	26	7	13	64	171	33	31	11
	Females..	356	5	31	8	13	67	150	37	25	20
	Total....	718	11	57	15	26	131	321	70	56	31
July.......	Males....	432	5	31	9	23	105	174	26	41	18
	Females..	408	8	21	12	27	92	172	27	29	20
	Total....	840	13	52	21	50	197	346	53	70	38

Table II—BIRTHS, 1892.—Continued.

MONTHS.	SEX.	Whole State.	DIVISIONS OF THE STATE.								
			Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Providence City.	Pawtucket.	Woonsocket.	Washington County.
August. . . .	Males. . .	436	11	28	8	26	88	171	44	33	24
	Females. .	380	7	28	8	33	74	163	29	24	14
	Total	816	18	56	16	59	162	337	73	57	38
September. .	Males. . . .	393	9	32	11	22	73	161	25	39	21
	Females. .	373	7	31	6	16	64	173	33	28	15
	Total	766	16	63	17	38	137	334	58	67	36
October	Males. . . .	400	19	22	7	19	94	159	42	22	16
	Females. .	375	9	36	5	19	73	165	24	29	15
	Total	775	28	58	12	38	167	324	66	51	31
November . .	Males. . . .	384	14	30	4	22	83	163	25	27	16
	Females. .	377	10	22	14	16	71	175	32	21	16
	Total . .	761	24	52	18	38	154	338	57	48	32
December. . .	Males. . . .	480	6	36	10	19	119	184	43	39	24
	Females. .	420	6	27	5	28	102	168	31	32	21
	Total	900	12	63	15	47	221	352	74	71	45
Whole Year.	Males. . . .	4,765	108	336	96	247	1,014	1,977	398	387	202
	Females. .	4,505	90	329	94	241	916	1,976	328	326	205
	Total	9,270	198	665	190	488	1,930	3,953	726	713	407

TABLE III—PLURALITY BIRTHS, 1892.

ARRANGED BY MONTHS, SEXES, AND DIVISIONS OF THE STATE; AND SHOWING THE NATIVITY OF THE PARENTS.

MONTHS.	Number of Cases.	SEX.	Number of Children.	Divisions of the State.							Nativity of the Parents.																				
				Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence Co. Towns.	Providence City.	Washington Co.	Native.	Danish.	English.	French.	Italian.	Irish.	Norwegian.	Portuguese.	Russian.	Scotch.	Swedish.	Western Islands.	American Father. English Mother.	American Father. Irish Mother.	English Father. Amer. Mother.	English Father. Welsh Mother.	German Father. Amer. Mother.	Irish Father. Amer. Mother.	Irish Father. English Mother.	French Father. Amer. Mother.	Swiss Father. Scotch Mother.
January. . . .	10	Males.... Females.	12 8	..	1	....	..	1	8	..	4	..	..	2	..	..	..	..	..	..	..	..	2	..	..	...	1	...	1	...	....
February. .	4	Males.... Females.	4 4	..	..	...	..	1	2	1	1	..	..	1	..	..	..	..	..	1	..	..	....	..	....	...	....	1	...	...	....
March	8	Males ... Females.	7 9	..	..	....	..	3	3	2	3	..	..	..	..	1	..	..	..	..	2	..	....	....	2	....	...	...	....	....	....
April	4	Males.... Females.	4 4	..	..	...	1	2	1	..	1	..	..	..	1	..	..	..	..	..	1	..	...	...	....	....	....	1	....	....	....
May.	7	Males.... Females.	10 4	..	..	....	..	4	3	..	5	..	..	..	..	1	..	..	..	..	..	..	....	....	...	....	1	....	...	....	....
June	8	Males.... Females.	8 8	..	1	1	..	1	5	..	1	..	..	1	..	1	1	1	..	1	..	1	..	...	...	..	....	1	...	....	....
July.	6	Males.... Females.	5 7	..	..	1	1	....	3	1	1	..	..	..	..	1	..	..	1	..	..	..	....	1	...	1	....	...	....	....	1
August	5	Males.... Females.	6 4	..	1	...	1	1	1	..	2	1	..	..	..	..	..	..	..	..	..	..	....	2	...	....	....	...	..	....	....
September. .	10	Males.... Females.	13 7	..	1	..	1	3	5	..	3	..	..	1	1	1	..	..	..	..	..	2	....	...	..	....	....	2	....	...	...
October	8	Males.... Females.	10 6	..	..	..	..	1	7	..	1	..	..	1	..	2	1	..	..	..	..	1	1	...	....	....	....	1	....	....	....
November . .	7	Males.... Females.	5 9	..	..	....	..	3	3	1	1	..	1	1	1	2	..	..	..	..	..	..	...	....	....	....	....	1	....	....	....
December . .	7	Males... Females.	8 6	..	..	..	..	4	2	1	2	..	1	1	1	..	..	..	1	..	..	..	....	...	...	....	....	....	...	1	....
Whole State.	84	Males.... Females.	92 76	..	4	2	4	24	14	6	25	1	2	8	4	9	2	1	2	2	3	4	3	3	2	1	2	7	1	1	1

TABLE IV.—MARRIAGES, 1892.

Arranged by Months and Divisions of the State.

MONTHS.	Whole State, 1891.	DIVISIONS OF THE STATE.									Whole State, 1892.
		Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Pawtucket.	Providence City.	Woonsocket.	Washington County.	
January	271	5	32	1	11	39	31	127	20	8	275
February	218	11	21	5	15	51	25	127	19	15	289
March	134	5	11	9	11	25	14	82	8	15	180
First Quarter	623	22	64	15	37	115	70	336	47	38	744
April	338	9	20	6	11	50	20	126	12	14	268
May	223	7	21	4	7	51	25	109	16	19	259
June	360	10	16	8	16	78	49	195	35	22	429
Second Quarter	921	26	57	18	34	179	94	430	63	55	956
July	238	5	15	2	8	42	21	96	16	13	218
August	251	5	15	7	12	37	15	118	22	15	246
September	337	5	21	7	9	63	34	149	15	17	320
Third Quarter	826	15	51	16	29	142	70	363	53	45	784
October	310	11	31	13	23	62	35	183	29	21	408
November	389	10	19	8	24	62	44	169	25	21	382
December	221	5	13	12	4	44	18	111	3	18	228
Fourth Quarter	950	26	63	33	51	168	97	463	57	60	1,018
Whole Year	3,320	89	235	82	151	604	331	1,592	220	198	3,502

Table V.—DEATHS, 1892.

Arranged by Months, Sexes, and Divisions of the State.

MONTHS.	SEX.	Whole State.	DIVISIONS OF THE STATE.									
			Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Pawtucket.	Providence City.	Woonsocket.	Washington County.	State Institutions.
January . . .	Males . .	439	15	38	12	24	91	34	163	28	27	7
	Females	487	14	44	17	20	88	34	183	31	46	10
	Total . .	926	29	82	29	44	179	68	346	59	73	17
February . .	Males . .	289	5	24	8	14	68	20	116	18	12	4
	Females	306	10	33	6	17	50	26	124	19	17	4
	Total . .	595	15	57	14	31	118	46	240	37	29	8
March	Males . .	284	6	28	2	12	63	25	116	17	10	5
	Females	298	6	21	6	26	46	35	113	26	14	5
	Total . .	582	12	49	8	38	109	60	229	43	24	10
April	Males . .	291	6	15	11	18	59	27	121	12	14	8
	Females	268	11	23	5	9	44	25	100	23	18	10
	Total . .	559	17	38	16	27	103	52	221	35	32	18
May	Males . .	291	7	19	5	18	62	20	121	19	12	8
	Females	270	8	19	5	13	59	21	113	13	15	4
	Total . .	561	15	38	10	31	121	41	234	32	27	12
June	Males . .	268	14	16	8	15	54	17	118	16	9	1
	Females	236	5	19	1	12	32	21	114	17	12	3
	Total . .	504	19	35	9	27	86	38	232	33	21	4
July	Males . .	413	14	38	11	27	62	38	176	27	10	10
	Females	399	9	40	7	18	81	41	149	31	13	10
	Total . .	812	23	78	18	45	143	79	325	58	23	20

Table V.—DEATH, 1892.—Continued.

MONTHS.	SEX.	Whole State.	DIVISIONS OF THE STATE.										
			Bristol County.	Kent County.	Newport County Towns.	Newport City.	Providence County Towns.	Pawtucket.	Providence City.	Woonsocket.	Washington County.	State Institutions.
August....	Males..	369	15	27	11	19	77	40	132	20	24	4
	Females	370	21	37	11	22	78	38	124	17	19	3
	Total ..	739	36	64	22	41	155	78	256	37	43	7
September .	Males..	303	10	33	8	16	62	18	121	14	14	7
	Females	306	7	17	13	24	63	32	125	12	9	4
	Total ..	609	17	50	21	40	125	50	246	26	23	11
October....	Males..	248	7	17	7	11	54	19	99	16	17	1
	Females	242	3	18	4	17	41	23	100	18	11	7
	Total ..	490	10	35	11	28	95	42	199	34	28	8
November.	Males..	250	12	13	9	14	40	22	111	13	11	5
	Females	241	10	15	4	11	46	26	108	8	7	6
	Total ..	491	22	28	13	25	86	48	219	21	18	11
December..	Males..	280	8	26	8	14	54	22	112	16	14	6
	Females	248	9	18	8	13	49	18	105	14	13	1
	Total ..	528	17	44	16	27	103	40	217	30	27	7
Whole Year	Males..	3,725	119	294	100	202	746	302	1,506	216	174	66
	Females	3,671	113	304	87	202	677	340	1,458	229	194	67
	Total ..	7,396	232	598	187	404	1,423	642	2,964	445	368	133

Table VI.—DEATHS, 1892.

Exhibiting the Whole Number, the Proportion to Population, the Number of each Sex, and the Number in each Period of Life, in every Town and Division of the State.

TOWNS AND DIVISIONS OF THE STATE.	Estimated Population in 1892.	DEATHS.				Under 1 year.	1 to 2.
		Total.	Per 1000 of population.	SEX.	Number of each Sex.		
Barrington.	1,510	25	16 6	Males.	9	1	...
				Females. ..	16	1	. .
Bristol.	5,500	102	18.6	Males. ..	53	10	...
				Females. ..	49	8	...
Warren	4,605	105	22.8	Males.	57	19	6
				Females. ..	48	8	3
Bristol County...	11,615	232	20.0	Males.	119	30	6
				Females. ..	113	17	3
Coventry.........	5,175	131	25 3	Males.	62	16	4
				Females. ..	69	6	2
East Greenwich...	3,300	72	21.8	Males.	31	6	1
				Females. ..	41	10	....
West Greenwich...	775	14	18.1	Males.	7	...	...
				Females. ..	7	....	...
Warwick	19,625	381	19.4	Males. ..	194	64	11
				Females. ..	187	52	8
Kent County.....	28,875	598	20.7	Males.	294	87	15
				Females. ..	304	68	10
Jamestown.	850	18	21.2	Males. ...	9	2	....
				Females. ..	9	3	...
Little Compton....	1,150	23	20.0	Males.	13	..	....
				Females. ..	10	..	....
Middletown	1,160	24	20.7	Males.	17	6	1
				Females. ..	7	2	....
Newport City ...	20,006	404	20.0	Males. ...	202	31	17
				Females. ..	202	26	16
New Shoreham . ..	1,350	35	25 9	Males.	19	4	1
				Females. ..	16	2	....
Portsmouth.......	1,925	28	14 5	Males.	14	2	...
				Females. ..	14	1	....
Tiverton.....	2,925	59	20.1	Males.	28	5	3
				Females. ..	31	12	..
Newport County..	29,366	591	20.1	Males.	302	50	22
				Females. ..	289	46	16
Burrillville........	5,625	110	19.6	Males.	57	19	4
				Females. ..	53	15	..
Cranston*........	7,600	125	16.4	Males.	62	11	2
				Females. ..	63	15	5
Cumberland.. ...	8,512	174	20.4	Males.	102	17	7
				Females. ..	72	11	2

* Not including State Institutions.

TABLE VI.—DEATHS, 1892.—Continued.

2 to 3.	3 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Age not stated.
....	..	..	....	1	1	....	....	1	2	1	2	..	....
....	....	....	..	1	2	....	2	1	3	3	2	1	....
..	...	....	..	4	1	5	6	6	11	4	6	..	..
...	1	1	1	1	3	2	3	7	9	5	6	1	1
1	1	1	..	....	3	4	3	1	6	12	....	....	....
2	...	1	1	3	2	4	4	2	5	4	9	....	....
1	1	1	....	5	5	9	9	8	19	17	8	....	..
2	1	2	2	5	7	6	9	10	17	12	17	2	1
2	2	1	....	....	5	2	1	3	6	11	7	2	....
1	2	2	2	4	6	5	5	7	13	7	3	4	....
...	....	3	1	....	2	2	..	3	1	4	8	...	....
....	....	1	..	1	5	3	3	4	5	5	4	....	...
..	..	....	....	....	1	1	1	....	....	2	2	..	....
....	...	1	....	....	1	.	1	....	2	1	....	1	....
8	9	4	5	9	10	3	6	16	18	21	10	...	....
3	2	3	6	7	15	19	10	11	15	18	15	3	....
10	11	8	6	9	18	8	8	22	25	38	27	2	....
4	4	7	8	12	27	27	19	22	35	31	22	8	....
....	..	1	....	...	....	1	..	...	1	1	2	....	1
....	..	....	1	....	1	1	...	....	2	1	....	....	....
....	....	...	1	..	....	1	1	....	2	2	5	1	....
....	....	....	....	....	1	1	1	1	2	3	1	....	...
....	...	1	....	....	2	....	....	2	2	2	1	....	....
...	....	....	....	....	....	....	1	1	2	1	..	....	...
5	6	10	3	2	10	16	24	15	27	20	14	2	....
6	7	11	3	5	15	17	11	20	22	25	13	5	...
....	..	....	1	....	2	1	1	1	3	3	2	...	....
...	....	....	....	..	1	1	....	1	2	3	6	..	....
....	....	....	...	1	1	....	....	2	1	2	4	....	1
....	....	..	..	....	1	1	....	....	2	5	4	..	....
....	....	....	2	....	1	2	3	....	6	3	2	1	...
....	....	1	....	....	3	2	3	3	...	4	3	..	....
5	6	12	7	3	16	21	29	20	42	33	30	4	2
6	7	12	4	5	22	23	16	26	32	42	27	5	..
1	1	2	2	1	1	4	2	1	9	5	4	1	....
...	....	1	...	....	5	3	6	8	6	4	3	2	....
1	2	3	2	....	8	5	2	3	9	9	5	...	.
1	1	1	2	2	6	5	1	3	5	8	6	2	....
3	1	3	3	3	15	10	10	16	4	7	3	....	....
3	3	....	1	4	5	8	7	5	9	8	5	1	....

Table VI.—DEATHS, 1892.—Continued.

TOWNS AND DIVISIONS OF THE STATE.	Estimated Population in 1892	DEATHS.				Under 1 year.	1 to 2.
		Total.	Per 1000 of population.	SEX.	Number of each sex.		
East Providence...	9,170	159	17.3	Males.....	83	15	5
				Females...	76	10	5
Foster..........	1,205	23	19.1	Males. ..	8	....	....
				Females...	15	2	....
Glocester	2,180	50	22.9	Males.....	24	5	....
				Females...	26	1	1
Johnston.....	10,885	131	12.3	Males.....	68	24	6
				Females...	63	14	5
Lincoln....... ...	20,650	450	21.8	Males.....	246	93	29
				Females...	204	63	10
North Providence..	2,340	43	18.4	Males.....	16	7	2
				Females...	27	3	..
North Smithfield ..	3,205	41	12.8	Males.....	21	1	3
				Females...	20	3	...
PAWTUCKET.......	29,640	642	21.7	Males.....	302	81	18
				Females...	340	65	17
PROVIDENCE CITY..	142,150	2,964	20.9	Males.....	1,506	357	65
				Females...	1,458	287	62
Scituate........ ...	3,080	64	20.8	Males.....	31	3	1
				Females...	33	6	1
Smithfield	2,550	53	20.8	Males. ...	28	3	...
				Females...	25	5	1
WOONSOCKET......	22,830	445	19.5	Males. ...	216	71	18
				Females...	229	67	19
PROVIDENCE CO. ..	271,622	5,474	20.2	Males.....	2,770	707	160
				Females...	2,704	567	128
Charlestown	900	19	21.1	Males.....	7	1	...
				Females...	12	2	....
Exeter.........	950	19	20.0	Males.....	11	2	....
				Females...	8	..	....
Hopkinton	2,890	59	20.4	Males. ...	29	2	1
				Females...	30	1	1
Narragansett......	1,530	11	6.1	Males.....	7	1	....
				Females...	4	....	....
North Kingstown..	4,300	60	14.0	Males. ...	32	5	1
				Females...	28	1	1
South Kingstown..	4,940	71	14.3	Males.....	29	6	....
				Females...	42	4	1
Richmond	1,610	32	19.9	Males.....	15	5	....
				Females...	17	2	....
Westerly.......	7,050	97	13.8	Males.....	44	10	2
				Females...	53	9	...
WASHINGTON CO...	24,170	368	15.2	Males.....	174	32	4
				Females...	194	19	3
State Institutions..	1,600	133	83.1	Males.....	66	2	....
				Females...	67	2	....

Table VI.—DEATHS, 1892.—Continued.

2 to 3.	3 to 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Age not stated.
....	4	1	4	1	3	4	5	15	8	11	6	....	1
1	...	2	2	4	8	6	6	7	6	10	8	1	..
....	....	...	....	....	....	....	..	....	1	4	2	1	....
....	....	....	..	....	....	2	2	2	1	5	1	...	....
....	....	...	1	1	...	1	....	1	5	7	2	1	...
....	....	2	...	....	....	..	2	4	3	6	5	2	....
....	2	....	1	1	6	4	4	4	4	8	1	1	2
....	1	..	...	2	9	5	2	8	7	5	3	1	1
5	4	3	1	6	16	12	21	17	14	11	9	...	5
3	5	7	4	9	26	18	14	15	13	8	6	2	1
....	1	....	1	....	1	....	....	1	1	2	....	....	....
1	1	1	1	3	2	2	....	3	2	3	5	....	....
1	3	1	...	....	1	1	2	....	5	2	1	....	....
1	2	1	...	1	2	....	2	1	1	4	2	..	....
5	6	4	5	10	23	28	22	29	32	21	17	1	....
6	2	3	5	10	32	23	33	34	52	34	18	3	3
37	36	53	35	37	124	154	159	135	149	106	51	8	...
26	32	24	30	37	130	134	124	147	181	138	94	12	...
....	1	....	2	1	1	1	2	1	3	10	4	1	....
....	...	2	....	2	4	3	1	....	2	8	2	2	...
2	1	2	1	...	2	3	2	2	4	5	1	..	...
....	...	....	2	2	2	....	1	3	4	2	3	....	...
4	9	9	...	3	23	17	4	14	23	16	4	....	1
10	5	6	5	6	24	15	15	23	14	11	7	2	...
59	71	81	58	64	224	244	235	239	271	224	110	14	9
52	52	50	52	82	255	224	216	263	306	254	168	30	5
....	...	...	....	....	..	....	....	1	1	2	2	..	...
....	..	....	....	1	....	1	2	..	...	4	2	..	...
1	....	....	2	..	1	...	..	1	1	1	2	....	..
....	....	....	....	1	4	....	....	....	1	1	1	...	....
1	2		...	....	1	1	1	2	5	7	6	....	....
...	....	....	1	3	3	1	1	2	5	8	4	....	....
....	....	..	1	..	2	...	1	....	....	....	2	....	...
....	..	....	....	....	....	....	3	..	1	...	....	....	...
....	....	....	....	....	1	1	3	3	7	7	3	1	...
....	...	1	2	....	3	3	1	1	4	4	5	2	..
....	....	1	2	....	...	1	3	3	5	..	4	3	1
....	..	..	1	1	3	6	5	2	2	15	1	1	....
....	....	1	3	....	2	....	1	....	....	1	2	....	...
....	....	2	..	....	1	.	2	...	5	3	2	....	...
....	..	..	..	2	2	3	5	6	3	6	5	...	...
....	....	2	....	1	4	5	2	5	9	5	9	1	1
2	2	2	8	2	9	6	14	16	22	21	26	4	1
....	....	5	4	7	18	16	16	10	27	10	24	4	1
....	....	....	....	1	6	14	17	14	4	7	1	....	....
..		.	...	...	8	7	8	16	10	13	3	....	....

TABLE VI Continued.—DEATHS, 1892.—RECAPITULATION.

DIVISIONS OF THE STATE.	Estimated Population in 1892.	DEATHS.				Under 1 year.	1 to 2.
		Total.	Per 1000 of Population.	SEX.	Number of each Sex.		
BRISTOL COUNTY ..	11,615	232	20.0	Males. ..	119	30	6
				Females. . .	113	17	3
KENT COUNTY. ..	28,875	598	20.7	Males.	294	87	15
				Females. . .	304	68	10
NEWPORT COUNTY . .	29,366	591	20.1	Males.	302	50	22
				Females. . .	289	46	16
PROVIDENCE CO. . . .	271,622	5,474	20 2	Males.	2,770	707	160
				Females. . .	2,704	567	128
WASHINGTON CO. . .	24,170	368	15.2	Males.	174	32	4
				Females. . .	194	19	3
STATE INSTITUTIONS.	1,600	133	83.1	Males. ..	66	2	. . .
				Females. . .	67	2	. . . .
WHOLE STATE.	367,248	7,396	20.1	Males	3,725	908	207
				Females. . .	3,671	719	160

Table VI Continued.—DEATHS, 1892.—Recapitulation.

2 to 3.	3 to 5.	5 to 10.	10 to 15.	15 to 20	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 to 90.	90 and over.	Age not stated.
1	1	1	....	5	5	9	9	8	19	17	8	...	...
2	1	2	2	5	7	6	9	10	17	12	17	2	1
10	11	8	6	9	18	8	8	22	25	38	27	2	...
4	4	7	8	12	27	27	19	22	35	31	22	8	...
5	6	12	7	3	16	21	29	20	42	33	30	4	2
6	7	12	4	5	22	23	16	26	32	42	27	5	....
59	71	81	58	64	224	244	235	239	271	224	110	14	9
52	52	50	52	82	255	224	216	263	306	254	168	30	5
2	2	2	8	2	9	6	14	16	22	24	26	4	1
....	..	5	4	7	18	16	16	10	27	40	24	4	1
....	..	..	....	1	6	14	17	14	9	7	1	....	....
....	....	....	....	...	8	7	8	16	10	13	3	...	....
77	91	104	79	84	278	302	312	319	383	343	202	24	12
64	64	76	70	111	337	303	284	347	427	392	261	49	7

TABLE VII.—CAUSES OF DEATH, 1892.

Arranged Alphabetically; showing the Number of each Sex, who died from each cause, in each month and in the whole year 1892, also the Number of Native and of Foreign Parentage, from each cause, for the year.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M	F.	M.	F.	Am.	For.	M.	F.	Total.
Accidents, Asphyxia	2	1	..	..	1	..	2	..	1	..	1	..	3	..	..	1	1	..	1	..	2	..	1	..	9	8	15	2	17
Burns and Scalds	1	2	..	1	..	1	..	4	1	..	..	2	..	3		..	..	..	1	..	..	3	2	..	9	12	5	16	21
Concussion of the Brain	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..	..	..	..	1	..	4	1	5	...	5
Drowning	5	..	2	..	1	..	2	..	5	..	3	1	8	2	6	3	2	1	2	..	..	2	2	1	17	31	38	10	48
Exposure and neglect	..	..	..	..	1	..	..	..	2	..	..	..	..	..	..	..	..	1	..	..	1	1	2	..	4	4	6	2	8
Falls	1	1	1	..	2	1	1	..	3	..	2	2	3	2	5	..	1	1	..	2	2	2	1	..	8	25	22	11	33
Flesh Wounds	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	.	2	2	...	2
Gunshot	..	..	..	..	..	..	..	..	2	..	..	..	2	..	..	..	..	1	..	..	..	..	1	..	2	4	5	1	6
Fractures and contusions	2	..	3	3	4	1	3	2	7	1	2	..	5	1	7	1	6	3	2	3	2	..	2	..	18	42	45	15	60
Heat and Sunstroke	..	..	..	..	..	..	..	..	..	..	3	..	9	2	1	1	.	..	..	..	1	..	..	..	2	15	14	3	17
Poisoning by Coal Gas	2	2	1	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	2	..	1	..	..	4	6	3	7	10
by Lead	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1	..	1
by Medicine	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	1	1
by Opium and Morph.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	2	..	1	1	2
by Paris Green	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	....	1	..	1	1
Otherwise	..	1	..	..	..	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	2	3	2	3	5
Railroad	1	..	1	..	..	..	3	..	2	..	1	..	..	..	5	..	7	..	2	..	4	..	3	..	10	19	29	..	29
Strangulation	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	1	...	1
Suffocation	..	..	..	..	..	..	..	..	1	..	4	..	..	..	2	..	1	..	..	..	..	..	..	..	1	7	8	...	8
Surgical Operations	..	..	1	.	..	..	..	..	..	1	..	2	1	1	..	..	..	..	..	1	2	2	..	..	5	6	4	7	11
Unspecified, etc.	..	.	..	..	1	..	1	.	2	1	2	..	2	1	3	..	1	..	1	..	1	..	3	..	12	7	17	2	19

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	Am.	For.	M.	F.	Total.
Abortion.	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	1	..	..	..	..	1	3	..	4	4
Abscess of Brain.	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1	2	3	...	3
Hip.	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	1	1
Kidney.	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...	1
Liver	1	..	..	..	..	..	..	..	1	..	1	1	..	1	..	1	..	2	..	..	..	..	..	..	4	4	3	5	8
Lung.	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	2
Neck.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	....	...	1	1
Pelvis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	1	..	..	3	1	..	4	4
Psoas.	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	1	1
Unspecified.	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	1	2	...	3	3
Adenitis.	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	1	1	1	2
Alcoholism.	2	1	..	1	1	..	5	..	1	1	1	..	4	3	2	1	3	..	..	2	..	..	1	..	8	21	20	9	29
Anæmia.	1	1	1	1	..	..	..	..	2	2	..	..	..	..	..	1	..	1	1	1	1	..	..	1	10	4	6	8	14
Anasarca.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	....	...	1	1
Aneurism of Aorta.	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	...	2
of Abdominal Aorta.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	....	1	..	1	1
Angina Pectoris	..	1	1	2	..	..	..	..	..	1	2	..	1	..	..	..	1	..	..	1	2	1	2	1	8	8	9	7	16
Appendicitis.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	...	1	1
Apoplexy.	15	14	5	8	10	16	6	12	4	12	11	12	11	8	7	9	9	9	10	11	11	7	15	6	124	114	114	124	238
Arthritis	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1	1	1	2
Ascites.	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	1	1	2	3
Asthenia.	1	1	1	..	1	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	1	..	3	4	4	3	7
Asthma.	2	1	1	1	..	1	..	1	..	..	..	..	..	..	..	..	1	1	..	..	..	..	2	..	4	7	6	5	11
Atelectasis Pulmonum	1	..	..	..	1	..	..	..	1	..	..	1	..	..	1	2	1	..	..	..	..	..	..	1	....	9	5	4	9
Atheroma of Arteries.	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	...	1
Bladder Diseases.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	1	1	2	...	2

TABLE VII.—CAUSES OF DEATH, 1892.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	M.	F.	Total.
Bone Diseases	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	1	1
Bowel Diseases	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	....	2	...	2
Obstriction	3	1	..	..	..	1	1	1	..	1	..	..	1	1	1	..	..	..	..	..	..	1	..	..	6	6	6	6	12
Ulceration	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	2	..	..	..	..	..	..	....	4	...	4	4
Brain Diseases	..	1	..	1	2	1	2	2	2	1	1	..	4	2	1	..	1	..	1	1	1	..	1	1	18	8	16	10	26
Atrophy	1	1	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	1	1	3	4
Congestion	1	2	1	1	..	..	2	1	..	2	..	1	..	1	1	1	..	3	..	..	1	1	1	1	11	10	7	14	21
Inflammation	1	1	3	1	2	..	..	..	1	1	..	1	2	..	1	1	1	1	2	..	..	..	..	..	2	17	13	6	19
Softening	2	1	1	..	..	..	2	..	..	3	1	..	..	..	1	2	..	..	..	1	1	..	1	1	10	7	9	8	17
Bronchitis, Acute	27	21	24	23	14	15	15	12	11	9	3	4	6	8	5	1	3	15	5	6	4	12	7	7	98	159	124	133	257
Chronic	5	6	1	2	1	3	..	3	2	1	2	1	3	2	2	2	1	1	1	..	2	2	3	5	19	32	23	28	51
Cancer of Abdomen	..	..	..	..	..	1	..	1	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	1	3	2	...	5	5
Bladder	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	2	1	1	2	3
Bowels	..	..	1	1	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	2	2	1	3	4
Breast	..	6	..	..	..	3	..	..	..	2	..	2	..	2	..	4	..	4	..	3	..	1	..	2	17	12	...	29	29
Face	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...	1
Hand	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	...	1	...	1
Lip	..	..	..	..	..	1	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	2	2	1	3
Liver	..	1	1	..	..	1	1	..	..	3	..	..	1	..	..	..	2	1	..	1	..	..	..	2	7	7	5	9	14
Lung	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	....	1	...	1	1
Mesentery and Omentum	1	..	..	1	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	1	3	4
Mouth	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	....	1	...	1	1
Neck	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	1	...	1
Œsophagus	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	..	1

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M	F.	M	F.	Am.	For.	M.	F.	Total.
Cancer of Pancreas	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1
Pelvis	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	2	..	2	2
Pubes	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1
Rectum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	..	..	1	..	3	1	2	2	4
Shoulder	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1
Stomach	1	2	..	..	..	3	1	1	2	1	1	..	2	..	4	2	3	..	1	2	..	1	1	5	15	18	16	17	33
Throat	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	..	2
Uterus	..	1	..	2	..	2	..	1	..	1	..	2	..	..	..	1	..	3	..	3	..	4	..	3	17	6	..	23	23
Unspecified	3	2	1	1	3	4	2	3	..	2	..	1	3	..	1	3	3	2	..	3	2	1	1	5	31	15	19	27	46
Carbuncle	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	2	2	2	2	4
Cellulitis	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1
Cerebritis	1	..	..	1	1	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	4	2	5	1	6
Child Birth	..	1	..	4	..	2	..	2	..	2	..	1	..	3	..	3	..	..	..	2	..	1	..	2	8	15	..	23	23
Placenta Prævia	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	2	2
Puerperal Convulsions	..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	2	..	..	..	1	..	2	4	4	..	8	8
Fever	..	2	..	..	..	3	..	4	..	1	..	3	..	..	..	2	..	2	..	2	..	4	..	1	10	14	..	24	24
Hemorrhage	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	4	..	4	4
Mania	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1
Septicæmia	..	2	..	1	..	..	..	1	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	3	3	..	6	6
Rupture of Uterus	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	..	2	2
Tubal Pregnancy	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1
Cholera Infantum	2	1	1	5	1	3	2	..	4	1	22	16	141	123	103	91	41	35	15	15	2	5	2	2	210	423	336	297	633
Morbus	..	..	1	..	..	..	..	..	..	..	1	..	6	4	9	4	5	1	1	..	..	..	1	..	13	20	24	9	33
Climacteria	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1
Colic	..	..	..	..	1	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	2	..	..	..	..	5	4	1	5
Consumption	36	48	32	30	28	26	34	38	36	28	16	39	26	35	28	35	32	30	27	34	33	30	27	26	248	506	355	399	754

TABLE VII.—CAUSES OF DEATH, 1892.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April		May		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		Total.
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For	M.	F.	
Convulsions	10	4	10	6	6	6	9	4	4	2	12	6	5	8	9	7	10	4	10	5	10	2	8	5	64	98	103	59	162
Croup	7	5	6	6	8	6	4	1	3	4	2	1	2	..	..	2	1	1	8	1	6	4	5	6	44	45	52	37	89
Cyanosis	..	..	1	..	..	..	..	1	1	..	..	1	..	1	1	..	..	1	..	..	..	1	2	..	7	3	5	5	10
Cystitis	2	..	..	..	3	..	3	..	1	..	3	..	..	..	..	..	2	..	..	..	1	..	2	1	7	11	17	1	18
Debility, General	1	..	..	..	2	2	1	1	1	2	..	3	1	2	1	3	1	..	1	..	2	..	..	..	8	16	11	13	24
Infantile	7	4	7	6	7	6	5	6	2	1	5	1	5	10	5	4	5	4	7	6	4	1	7	1	38	78	66	50	116
Premature Birth	6	2	2	7	4	..	5	5	5	7	7	6	9	5	11	6	11	5	2	5	4	4	5	4	57	70	71	56	127
Senile	3	5	3	2	1	1	3	4	5	6	4	1	4	2	2	5	1	1	5	1	..	2	5	5	48	23	36	35	71
Delirium Tremens	..	..	..	..	..	..	1	..	..	..	1	..	2	..	..	..	2	..	1	..	..	..	..	..	...	7	7	...	7
Diabetes	3	2	3	2	..	2	..	3	1	3	2	..	1	1	..	..	1	..	1	..	..	1	..	..	18	8	12	14	26
Mellitus	..	1	..	..	1	..	..	..	..	..	..	..	..	..	1	1	..	1	4	1	..	1	..	..	4	7	6	5	11
Diarrhœa, Acute	1	1	1	2	1	2	3	1	1	..	2	4	19	13	11	12	7	9	5	8	2	..	3	..	41	67	56	52	108
Chronic	2	1	..	..	3	1	..	1	..	..	..	1	..	..	..	2	1	1	1	2	1	1	..	2	15	5	8	12	20
Diphtheria	2	5	3	6	5	7	5	3	7	2	6	2	4	2	1	4	2	1	5	..	2	7	6	2	44	45	48	41	89
Dropsy	1	1	1	1	..	4	2	2	1	3	3	1	1	..	1	5	2	..	..	2	1	1	4	1	23	15	17	21	38
Dysentery	3	..	..	..	3	3	1	1	..	1	2	4	9	5	8	10	5	7	2	1	..	1	1	..	25	42	34	33	67
Chronic	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	1	..	1	..	..	..	..	..	1	3	2	2	4
Dyspepsia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	..	..	1	2	1	2	3
Dysuria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	....	1	...	1
Embolism	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	....	..	1	1
Empyema	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	1	2	1	2	3
Emphysema	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	....	1	1	...	1
Enteritis	2	..	2	1	3	1	1	..	2	1	1	3	6	5	6	7	2	2	1	..	1	2	1	3	25	28	28	25	53
Gastro	1	..	..	..	..	..	1	1	..	2	2	1	2	4	..	..	..	1	..	2	1	..	..	..	4	14	7	11	18

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	Am	For.	M.	F.	Total.
Entero-Colitis	..	..		..	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	....	2	...	2	2
Epilepsy	1	..	1	..	2	..	1	1	3	1	2	1	1	1	1	1	1	..	..	1	2	2	1	1	14	11	16	9	25
Erysipelas	3	2	..	3	1	1	3	3	1	1	1	..	..	..	1	1	..	..	..	..	1	..	1	..	9	14	12	11	23
Exhaustion	1	2	4	1	..	1	1	1	1	5	..	1	..	..	..	1	..	1	2	1	1	..	1	..	8	17	11	14	25
Fever, Catarrhal	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	....	...	1	1
Continued	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1	....	...	1	1
Intermittent	1	..	1	..	..	..	..	1	..	..	1	..	1	1	1	1	1	..	..	..	..	..	..	..	3	6	6	3	9
Malarial	..	1	..	..	..	..	..	..	..	1	2	2	..	1	1	4	2	3	4	1	2	1	..	..	9	16	11	14	25
Remittent	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	1	1	1	2
Typhoid	8	5	7	4	4	2	2	3	7	2	5	1	3	7	8	5	8	10	8	6	10	5	5	6	53	78	75	56	131
Unspecified	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..	1	..	2	..	..	1	5	...	6	6
Gall Stones	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	..	2	1	..	3	3
Gangrene of Foot	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	3	1	4	...	4
of Hand	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	1	...	1
of Leg	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	1	1	2
Senile	1	..	..	..	2	..	2	..	..	..	..	..	..	2	..	1	1	1	1	..	..	..	..	..	9	2	7	4	11
Unspecified	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	1	3	...	3
Gastritis, Acute	2	..	2	1	1	1	3	..	2	3	1	1	2	3	1	2	4	4	2	1	1	1	1	2	13	28	22	19	41
Chronic	..	..	..	..	1	..	..	..	1	..	1	..	..	..	1	..	..	..	1	..	1	..	..	..	2	4	6	...	6
Heart Diseases	19	16	15	17	20	19	18	15	22	14	12	10	10	12	10	11	16	11	12	13	9	13	17	14	166	179	180	165	345
Dilatation	..	..	2	1	..	..		..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	1	5	1	3	3	6
Fatty Degeneration	..	..	..	..	..	1	1	1	..	1	..	2	..	..	1	1	..	1	..	1	..	..	..	..	9	1	2	8	10
Hypertrophy	1	..	..	..	..	1	..	..	..	..	..	..	..	2	..	1	..	1	..	..	1	..	1	..	3	5	3	5	8
Inflammation	1	1	..	..	..	1	1	1	..	1	..	..	..	1	2	..	..	1	1	..	..	1	2	..	7	7	7	7	14
Valvular Disease	6	2	4	3	1	1	4	3	4	6	3	3	2	3	6	7	6	9	4	..	2	4	6	4	50	46	48	48	96
Hæmoptysis	..	..	1	..	1	..	..	..	1	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	1	4	5	...	5

TABLE VII.—CAUSES OF DEATH, 1892.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M	F.	M.	F.	M.	F.	M.	F.	Am.	For.	M.	F.	Total.
Hemiplegia	..	...	1	..	1	1	1	..	..	..	..	..	..	..	..	..	..	1	1	1	..	2	..	1	8	2	4	6	10
Hemorrhage from Bowels	2	1	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	1	..	..	1	..	..	..	4	4	5	3	8
from Umbilicus	..	..	..	1	..	1	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	5	....	2	3	5
from Veins, etc.	..	...	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	....	1	...	1	1
Unspecified	..	...	1	2	1	..	1	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	1	2	4	7	7	4	11
Hernia	..	...	1	2	..	1	1	..	..	..	..	1	1	1	..	1	2	..	2	..	2	2	..	1	5	13	9	9	18
Femoral	..	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	1	...	1	1
Inguinal	..	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	1	1	1	1	2
Umbilical	..	...	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	....	1	...	1	1
Hip Disease	..	...	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	1	..	..	..	1	2	3	...	3
Homicide	..	...	..	..	..	1	..	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	1	3	...	4	4
Hydrocephalus	1	...	..	1	1	..	..	2	1	3	3	1	2	1	..	2	..	..	1	1	1	1	..	..	10	12	10	12	22
Icterus Neonatorum	..	...	..	..	..	..	..	..	..	..	..	..	1	..	1	..	1	..	..	..	..	..	..	..	....	3	3	...	3
Inanition	1	2	2	..	1	1	..	1	..	..	5	1	..	..	2	1	..	1	..	1	..	2	1	..	13	9	12	10	22
Indigestion	..	2	2	2	..	1	..	..	2	1	2	..	1	..	1	..	..	2	3	1	..	..	..	1	11	10	11	10	21
Inflammation	1	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...	1
Influenza	81	117	19	33	19	12	11	16	4	5	3	3	..	..	..	2	2	1	1	1	..	1	2	3	170	166	142	194	336
Innutrition	..	...	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	...	2	2	...	2
Insanity	..	1	2	..	..	..	2	..	3	..	1	1	2	4	1	..	1	2	1	1	3	1	1	..	15	12	17	10	27
Intussusception	..	...	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	2	...	2
Ischuria	..	...	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	...	2
Jaundice	1	...	..	1	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	1	..	..	..	1	1	5	2	4	6
Kidney Disease	..	1	1	..	4	..	..	1	1	..	..	1	1	..	1	..	2	1	1	1	1	..	..	..	10	7	12	5	17
Addison's Disease	..	...	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	...	1	..	1

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	Am.	For.	M.	F.	Total.
Kidney Diseases, Bright's Dis.	7	5	5	4	6	7	9	7	4	4	10	5	8	7	7	11	6	7	11	7	6	7	8	12	85	85	87	83	170
Laryngismis Stridulus	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	1	...	1
Laryngitis	..	3	..	..	..	..	..	1	..	..	..	..	..	1	1	1	1	..	..	..	..	1	..	..	3	6	2	7	9
Leucocythemia	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	..	2	....	1	1	2
Liver Disease	..	1	1	2	..	1	..	..	..	1	..	2	..	1	1	1	..	1	1	1	1	1	1	..	7	10	5	12	17
Amyloid Degeneration	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	...	1	...	1	1
Atrophy	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	1	...	1
Cirrhosis	2	1	2	..	2	..	..	3	..	..	..	1	4	..	4	2	..	1	1	..	1	2	1	1	10	18	17	11	28
Hypertrophy	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	....	4	2	2	4
Inflammation	1	..	..	..	1	2	..	2	..	2	..	2	..	..	..	1	..	..	2	1	..	..	1	..	7	8	5	10	15
Locomotor Ataxia	1	..	..	..	..	..	..	..	1	..	1	..	..	..	..	1	..	..	..	..	..	..	1	1	4	2	4	2	6
Lung Diseases	..	..	..	..	..	..	1	..	1	..	..	..	1	..	1	..	1	..	..	..	..	1	1	..	2	5	6	1	7
Gangrene	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	....	...	1	1
Œdema	..	2	1	..	1	1	1	..	..	..	..	1	..	..	..	..	..	..	1	1	1	..	..	..	4	6	5	5	10
Malformation of Heart	..	..	..	1	..	..	3	..	..	..	1	..	..	..	2	..	..	1	..	..	1	1	1	..	7	4	8	3	11
Spina Bifida	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	1	1
Unspecified	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1	1	..	..	..	..	..	..	..	3	1	3	1	4
Malignant Pustule	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	...	1	...	1	1
Malnutrition	..	..	1	..	..	..	..	1	1	..	..	1	.	2	1	1	4	..	..	..	3	3	1	2	7	14	11	10	21
Marasmus, Gen	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	1	..	1	1	..	..	1	..	..	2	4	3	3	6
Infantile	2	..	3	2	3	..	5	2	2	2	3	2	5	3	4	2	3	7	1	1	4	2	2	..	31	29	37	23	60
Senile	..	1	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2	2	...	4	4
Measles	1	2	..	1	1	3	1	2	4	2	3	1	1	1	1	1	..	..	..	..	..	..	2	1	10	18	14	14	28
Meningitis	3	7	10	2	6	5	9	4	3	9	7	5	5	6	4	7	5	5	1	6	3	4	4	1	57	64	60	61	121
Cerebro-Spinal	..	2	..	..	1	1	..	..	2	..	1	..	..	1	2	..	..	2	..	1	4	1	..	..	5	13	10	8	18
Spinal	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	2	..	..	1	..	..	..	1	2	5	4	5	4	9

TABLE VII.—CAUSES OF DEATH, 1892.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	M.	F.	Total.
Meningitis, Tubercular	5	..	1	3	..	1	5	..	4	2	1	3	1	1	1	1	2	1	2	1	..	..	4	1	20	20	26	14	40
Menorrhagia	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	...	1	1
Myelitis	1	..	1	1	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	6	4	3	7
Necrosis of Spine	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	1	...	2	2
Nephritis	3	2	1	1	1	2	2	2	1	1	4	4	3	4	3	1	3	2	1	3	2	1	1	2	23	27	25	25	50
Nervous Prostration	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2	...	1	1	2
Neuralgia	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	....	1	...	1	1
Neurosthenia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	....	1	...	1	1
Obstipation	..	..	1	..	..	..	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	2	3	1	4
Obstruction of Gall Duct	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	1	...	1	1
Œdema Glottidis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	1	1	2
Old Age	11	27	9	15	5	15	3	13	4	14	14	7	8	6	11	9	8	10	7	19	6	10	9	18	168	88	95	161	256
Opium Habit	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	1	..	..	..	..	3	....	2	1	3
Ophthalmia	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	1	1
Ovariotomy	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	.	...	1	1
Paralysis	3	7	5	2	2	5	2	1	3	5	3	2	5	7	5	4	5	4	3	1	10	3	3	10	54	46	49	51	100
Pancreatitis	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...	1
Paraplegia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	....	1	...	1	1
Paresis	..	..	..	..	1	1	.	..	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	3	2	3	2	5
Parotitis	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	...	1
Pericarditis	..	..	..	..	..	..	..	..	1	..	1	..	..	..	1	..	..	..	..	..	..	..	1	1	2	3	4	1	5
Peritonitis, Acute	1	..	2	3	2	3	3	1	6	3	3	2	3	7	1	8	1	3	..	2	..	1	2	4	24	32	24	37	61
Pharyngitis	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	..	1	1
Phlebitis	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..		1	...	1	1

CAUSES OF DEATH.	Jan.		Feb.		Mar		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	Am.	For.	M.	F.	Total.
Pleurisy	3	..	1	2	2	1	2	..	1	2	3	..	1	1	..	..	..	..	1	1	4	3	..	3	9	22	18	13	31
Pneumonia.	65	80	30	43	41	40	44	31	39	24	9	13	5	9	6	5	7	8	19	16	33	24	32	22	261	384	330	315	645
Pott's Disease	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	....	3	2	1	3
Prostate Disease	1	..	..	..	..	..	..	..	1	..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	3	2	5	...	5
Purpura Hemorrhagica.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	....	1	1	...	1
Pyæmia	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	1	2
Rachitis	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	...	1	1
Rheumatism.	..	2	1	1	3	2	..	2	3	1	1	1	..	3	.	1	2	1	1	2	2	2	1	1	15	18	14	19	33
Acute	..	..	..	1	..	..	1	..	1	2	2	1	1	..	..	..	..	..	..	..	..	2	..	1	3	9	5	7	12
Chronic.	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	1	2	1	2	3
Scarlatina.	2	4	4	3	4	4	2	..	5	2	4	2	1	1	1	2	1	1	2	2	3	2	9	6	21	46	38	29	67
Scrofula	2	..	..	..	..	1	..	2	..	..	2	1	..	1	..	..	1	..	1	..	..	..	..	..	5	6	6	5	11
Septicæmia	..	..	1	1	1	..	..	1	..	2	1	1	1	2	..	..	..	1	..	..	..	1	..	..	8	5	4	9	13
Shock	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	...	1	1
Skin Disease, Eczema	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	1	3	..	1	2	3
Elephantiasis.	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	...	1	1
Small Pox	..	..	1	..	..	..	1	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	3	3	1	4
Spinal Diseases.	..	2	..	..	..	..	..	1	1	..	..	1	1	..	..	1	..	..	..	..	..	..	..	..	3	4	2	5	7
Stomach Diseases.	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	...	4	1	3	4
Ulceration	..	..	..	1	..	..	..	..	..	2	1	..	1	..	..	..	..	..	..	1	1	..	..	..	2	5	3	4	7
Stomatitis.	..	1	..	..	..	..	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	3	2	2	3	5
Strictures.	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	...	1	1	...	1
of Œsophagus	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	....	...	1	1
of Rectum	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	2	....	1	1	2
Suicide by Chloroform.	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	1	...	1
by Coal Gas.	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	1	...	1

TABLE VII.—CAUSES OF DEATH, 1892.—Continued.

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Am.	For.	M.	F.	Total.
Suicide by Cutting Throat	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	....	1	...	1
by Drowning	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	...	2	2	...	2
by Hanging	..	..	..	..	..	.	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	....	1	...	1	1
by Opium and Morphine	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	1	....	3	2	1	3
by Shooting	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2	...	2
Unspecified	3	..	..	..	..	..	..	..	..	..	1	1	..	1	1	..	..	..	..	..	1	..	..	..	6	2	6	2	8
Syncope	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	1	1	2	...	2
Synovitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	....	1	...	1	1
Syphilis	..	2	..	..	..	..	..	..	..	1	..	..	1	1	1	..	..	..	1	..	..	..	..	..	4	3	3	4	7
Congenital	..	..	..	..	..	1	..	..	1	..	..	1	1	..	1	..	1	..	..	1	..	..	..	..	3	3	4	3	7
Tabes Dorsalis	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	2	....	2	...	2
Mesenterica	1	2	1	..	..	3	1	..	..	1	..	1	..	3	1	4	1	2	1	1	..	..	3	..	7	19	9	17	26
Teething	..	1	..	..	..	1	..	..	..	2	2	2	2	1	..	1	3	..	1	..	..	1	1	..	6	12	9	9	18
Tetanus	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	1	3	4	...	4
Thrombosis	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	....	1	1	...	1
Tonsillitis	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..	..	..	..	..	2	3	2	3	5
Trismus Nascentium	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	2	....	1	1	2
Tuberculosis	5	6	1	3	2	1	1	2	..	5	1	3	..	2	1	..	1	3	4	..	1	4	2	2	28	22	19	31	50
Tumors of Abdomen	..	..	..	1	..	..	..	..	..	..	..	..	..	3	..	..	..	1	..	..	..	..	1	1	3	4	1	6	7
Bladder	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	1	...	1
Brain	..	..	2	..	..	..	..	..	..	1	..	..	1	1	2	..	..	1	1	..	1	..	..	..	9	1	7	3	10
Kidney	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	....	...	1	1
Liver	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	2	....	1	1	2
Neck	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	....	...	1	1

CAUSES OF DEATH.	Jan.		Feb.		Mar.		April.		May.		June.		July.		Aug.		Sept.		Oct.		Nov.		Dec.		PARENTAGE.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	Am.	For.	M.	F.	Total.
Ovary	..	1	..	..	..	..	..	..	..	1	..	1	..	..	..	1	..	2	..	..	..	..	..	..	4	2	...	6	6
Testicles	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	....	1	1	...	1
Uterus	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	....	...	1	1
Unspecified	..	..	..	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	1	1	1	1	7	....	2	5	7
Ulcers	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	....	1	...	1	1
Uræmia	1	2	3	..	1	..	..	2	1	2	2	..	..	..	2	..	..	1	..	..	.	..	..	1	7	11	10	8	18
Uterine Disease	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	1	..	..	..	..	2	1	...	3	3
Whooping Cough	3	3	1	3	2	..	..	1	1	..	1	1	1	..	1	4	..	..	..	..	..	1	..	2	14	11	10	15	25
Unknown	1	6	1	2	1	1	1	1	1	2	..	..	1	2	2	..	1	2	2	..	..	..	1	..	11	17	12	16	28

TABLE VIII.—CAUSES OF DEATH, 1892.

Arranged Alphabetically; Showing the Number of each Sex, who died from each Cause, in each Period of Life.

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Accidents, Asphyxia	7	1	1	..	..	..	..	..	..	..	..	..	1	..	1	..	2	..	..	..	..	1	1	..	1	..	..	..	..	..	1	..	15	2	17
Burns and Scalds	..	..	1	..	..	1	1	1	1	3	..	1	..	1	..	2	1	..	..	1	..	2	..	1	..	2	1	1	..	..	..	..	5	16	21
Concussion of the Brain	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	..	..	..	1	..	..	..	1	..	..	..	..	..	5	...	5
Drowning	..	1	..	..	1	..	2	..	8	..	7	2	3	2	8	..	4	2	5	1	..	2	..	..	..	..	..	..	..	..	..	..	38	10	48
Exposure and neglect	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	1	..	3	1	..	..	..	..	..	..	..	..	6	2	8
Falls	..	..	..	3	..	1	..	..	..	..	1	..	..	..	4	..	6	1	6	..	1	2	2	1	2	2	..	..	..	1	..	..	22	11	33
Flesh Wounds	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	...	2
Gunshot	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..	1	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	5	1	6
Fractures and contusions	1	..	..	..	..	..	..	..	1	..	5	..	2	..	10	..	8	..	4	2	4	..	2	3	5	4	2	2	1	4	..	..	45	15	60
Heat and Sunstroke	3	..	..	..	..	..	1	..	..	..	..	..	1	..	1	1	1	..	3	..	2	..	1	1	1	1	..	..	..	..	..	..	14	3	17
Poisoning by Coal Gas	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2	1	1	..	1	1	..	..	..	..	..	..	1	1	..	..	..	3	7	10
by Lead	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	...	1
by Medicine	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1
by Opium and Morph.	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2
by Paris Green	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1
Otherwise	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	2	3	5
Railroad	..	..	..	..	..	..	..	..	1	..	..	..	1	..	12	..	4	..	6	..	3	..	1	..	..	..	1	..	..	..	..	..	29	...	29
Strangulation	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	...	1
Suffocation	2	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	8	...	8
Surgical Operations	1	..	..	..	..	..	..	..	..	..	..	..	..	1	1	3	..	..	1	1	..	1	..	1	1	..	..	..	..	..	..	..	4	7	11
Unspecified, etc.	1	..	1	..	..	1	..	..	1	..	1	..	..	..	1	1	2	..	2	..	2	..	1	..	2	..	1	..	1	..	1	..	17	2	19

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M	F.	M.	F.	M.	F.	M.	F.	M	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Abortion	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..	...	4	4
Abscess of Brain	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	...	3
Hip	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1
Kidney	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	...	1
Liver	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	1	1	1	..	1	..	..	1	..	1	..	..	..	..	..	..	..	3	5	8
Lung	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	1	2
Neck	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	...	1	1
Pelvis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	...	4	4
Psoas	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1
Unspecified	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	...	3	3
Adenitis	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2
Alcoholism	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	7	2	5	3	4	1	1	3	..	..	..	..	..	..	..	..	20	9	29
Anæmia	..	..	..	..	..	..	1	..	..	..	1	1	..	..	..	2	..	2	..	..	..	..	3	3	1	..	..	..	..	..	..	..	6	8	14
Anasarca	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	...	1	1
Aneurism of Aorta	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	2	...	2
of Abdominal Aorta	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	...	1	1
Angina Pectoris	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	2	2	1	3	2	..	2	1	..	..	..	..	..	9	7	16
Appendicitis	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1
Apoplexy	..	..	..	..	..	..	1	..	..	..	..	..	..	1	2	2	10	3	14	13	17	22	31	29	22	35	16	16	1	2	..	1	114	124	238
Arthritis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	1	1	2
Ascites	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	1	2	3
Asthenia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	3	..	..	1	..	1	..	..	..	..	4	3	7
Asthma	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	2	..	..	1	4	1	..	1	..	..	..	..	..	..	6	5	11
Atelectasis Pulmonum	5	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	4	9
Atheroma of Arteries	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	...	1
Bladder Diseases	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	2	...	2

TABLE VIII.—CAUSES OF DEATH, 1892.—Continued.

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Bone Diseases																								1									...	1	1
Bowel Diseases													1						1														2	...	2
Obstruction	1		1												1			1	2	1		1		1	1	2							6	6	12
Ulceration														1		1		1		1													...	4	4
Brain Diseases	1	1	3	1			1		1		1		1		1			1	1		3	1	1	3	2	2		1					16	10	26
Atrophy																		1						1		1	1						1	3	4
Congestion	2	4	2	3	1		1	3				1						1					1	1		1							7	14	21
Inflammation	5	4	2	1	1						1		1					1			3												13	6	19
Softening																1			1		2	2	2	2	2	2	1	1			1		9	8	17
Bronchitis, Acute	53	44	13	8	5	6	6	1	2		1		1		3	6	4	9	3	3	11	8	6	20	8	11	7	15	1	2			124	133	257
Chronic													1			4	1	2	2	1	5	2	6	9	6	9	1	1	1				23	28	51
Cancer of Abdomen																1				1		2				1							...	5	5
Bladder																1						1			1								1	2	3
Bowels																	1	1				1				1							1	3	4
Breast																		4		5		6		6		6		1		1			...	29	29
Face																							1										1	...	1
Hand																											1						1	...	1
Lip																			1						1	1							2	1	3
Liver																		1	1	1	1	4	3	3									5	9	14
Lung																				1													...	1	1
Mesentery and Omentum																	1			1		1		1									1	3	4
Mouth																										1							...	1	1
Neck																							1										1	...	1
Œsophagus																							1										1	...	1

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M	F	M	F.	M.	F.	M	F	M	F.	M.	F.	M.	F.	M.	F.	Total.
Cancer of Pancreas																										1								1	1
Pelvis																				1		1												2	2
Pubes																						1												1	1
Rectum																			1	1	1			1									2	2	4
Shoulder																						1												1	1
Stomach																			3	4	5	4	4	4	2	4	2	1					16	17	33
Throat																			1		1												2		2
Uterus																		5		10		3		2		2		1						23	23
Unspecified																	3	4	1	3	2	3	6	9	4	7	3	1					19	27	46
Carbuncle																								2	1		1						2	2	4
Cellulitis																										1								1	1
Cerebritis	1				1		1													1	2												5	1	6
Child Birth														2		10		10		1														23	23
Placenta Prævia																1		1																2	2
Puerperal Convulsions														1		4		3																8	8
Fever														2		12		8		2														24	24
Hemorrhage																1		3																4	4
Mania																1																		1	1
Septicæmia																4		2																6	6
Rupture of Uterus																		2																2	2
Tubal Pregnancy																1																		1	1
Cholera Infantum	281	250	50	43	5	4																											336	297	633
Morbus							7		1						3				2		3	2	5	3	3	3		1					24	9	33
Climacteria																																1		1	1
Colic		1	3																				1										4	1	5
Consumption	12	8	6	1		3	3	2	4	3	4	9	22	54	96	135	89	80	52	43	38	33	21	13	7	12	1	3					355	399	754

TABLE VIII.—CAUSES OF DEATH, 1892.—Continued.

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F	M.	F.	M.	F.	Total.
Convulsions	70	34	13	8	7	5	9	1	3	3	1	..	..	..	..	1	..	3	..	2	..	..	..	..	..	..	..	..	..	1	..	1	103	59	162
Croup	11	1	9	11	10	2	14	10	7	12	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	52	37	89
Cyanosis	5	4	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	5	5	10
Cystitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	..	3	..	8	..	4	..	..	..	..	..	17	1	18
Debility, General	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	2	3	3	5	7	..	..	..	..	..	..	1	1	11	13	24
Infantile	62	46	4	3	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	66	50	116
Premature Birth	71	56	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	71	56	127
Senile	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	18	14	15	18	3	3	..	..	36	35	71
Delirium Tremens	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	3	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	7	...	7
Diabetes	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	3	2	4	4	2	4	1	3	..	1	..	..	..	..	12	14	26
Mellitus	..	..	..	..	..	..	..	..	1	1	..	..	..	..	2	..	2	..	1	1	..	1	..	1	..	..	..	1	..	..	..	..	6	5	11
Diarrhœa, Acute	38	28	5	6	2	..	..	..	..	2	..	..	..	1	1	1	..	1	1	..	..	4	2	3	2	2	4	4	1	..	..	..	56	52	108
Chronic	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	1	..	1	4	5	3	..	3	1	..	..	..	8	12	20
Diphtheria	2	3	5	4	4	7	10	8	14	12	8	5	..	..	4	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	1	..	48	41	89
Dropsy	2	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	3	1	4	5	9	5	4	2	..	..	..	..	..	17	21	38
Dysentery	7	6	2	2	5	..	1	..	..	..	2	..	..	1	..	1	1	1	2	2	2	6	5	5	3	3	4	5	..	1	.	..	34	33	67
Chronic	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	2	2	4
Dyspepsia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1	..	..	..	..	..	..	..	..	..	1	2	3
Dysuria	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	1
Embolism	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1
Empyema	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	1	..	..	..	..	..	..	1	2	3
Emphysema	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	...	1
Enteritis	12	5	2	3	..	..	..	..	1	3	2	1	..	1	2	1	1	1	2	5	3	1	1	3	1	1	1	..	..	..	..	..	28	25	53
Gastro	..	..	..	..	..	..	..	1	2	..	1	..	..	1	1	2	1	2	2	1	..	1	..	1	..	1	..	1	..	..	..	..	7	11	18

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Entero-Colitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	...	2	2
Epilepsy	..	..	..	..	..	..	..	..	..	..	..	1	2	2	2	2	3	1	1	1	3	1	2	1	2	..	1	..	..	..	..	..	16	9	25
Erysipelas	1	1	..	1	..	..	..	..	..	..	..	..	1	..	..	1	2	..	2	2	2	2	3	1	1	1	..	2	..	..	..	..	12	11	23
Exhaustion	..	1	1	..	..	..	..	..	..	..	..	..	1	..	1	..	2	3	1	4	3	2	1	3	..	1	..	..	..	..	1	..	11	14	25
Fever, Catarrhal	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1
Continued	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1
Intermittent	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	1	..	1	2	1	2	..	..	..	..	..	6	3	9
Malarial	1	1	..	1	..	..	..	..	..	2	2	..	1	..	2	3	1	1	1	2	..	2	2	1	..	1	1	..	..	..	..	..	11	14	25
Remittent	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2
Typhoid	..	1	1	..	..	..	1	1	3	3	3	8	14	4	24	17	11	8	7	8	5	5	5	1	1	..	..	..	..	..	..	..	75	56	131
Unspecified	..	..	..	1	..	..	..	2	..	1	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	6	6
Gall Stones	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	3	3
Gangrene of Foot	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	1	..	1	..	..	..	..	..	4	...	4
of Hand	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	...	1
of Leg	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	..	..	..	1	1	2
Senile	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	2	3	2	..	1	..	..	..	7	4	11
Unspecified	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	3	...	3
Gastritis, Acute	4	1	2	..	..	..	1	..	2	..	..	..	..	..	..	4	3	5	3	2	1	2	3	4	2	1	1	..	..	..	..	..	22	19	41
Chronic	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	1	..	2	..	..	..	..	..	..	..	6	...	6
Heart Diseases	4	5	1	..	1	..	..	1	5	1	2	7	5	4	5	8	11	10	17	19	32	35	44	37	42	26	10	12	..	..	1	..	180	165	345
Dilatation	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	1	2	1	..	..	..	..	..	3	3	6
Fatty Degeneration	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	2	1	3	1	1	..	..	..	..	2	8	10
Hypertrophy	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	1	1	1	1	1	..	..	2	..	..	..	..	..	..	3	5	8
Inflammation	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	1	2	..	2	1	..	1	1	..	..	2	..	1	..	..	..	..	7	7	14
Valvular Disease	1	..	..	1	..	..	..	..	1	..	2	2	1	2	2	4	2	5	8	3	8	10	9	9	13	9	1	3	..	..	..	..	48	48	96
Hæmoptysis	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	2	..	1	..	..	..	..	..	..	..	..	..	5	...	5

TABLE VIII.—CAUSES OF DEATH, 1892.—Continued.

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Hemiplegia	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	.	1	..	..	2	3	1	1	..	..	..	..	4	6	10
Hemorrhage from Bowels	2	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	1	..	..	..	1	..	1	.	..	..	..	..	..	..	..	..	5	3	8
from Umbilicus	2	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	3	5
from Veins, etc.	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1
Unspecified	4	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	1	..	..	1	..	..	1	..	..	..	..	..	..	1	7	4	11
Hernia	..	1	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	..	1	4	1	2	2	1	1	..	1	..	..	..	9	9	18
Femoral	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	...	1	1
Inguinal	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2
Umbilical	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	...	1	1
Hip Disease	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	3	...	3
Homicide	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	...	4	4
Hydrocephalus	7	8	3	2	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	10	12	22
Icterus Neonatorum	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	3	...	3
Inanition	12	7	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	1	..	..	..	..	..	..	12	10	22
Indigestion	9	8	1	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	11	10	21
Inflammation	..	.	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	...	1
Influenza	12	14	4	6	3	2	2	3	2	..	2	2	..	2	8	5	14	5	11	14	13	20	22	52	36	38	12	29	1	2	..	..	142	194	336
Innutrition	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	...	2
Insanity	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	2	1	5	4	..	5	2	3	1	..	..	..	..	17	10	27
Intussusception	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..	2
Ischuria	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	...	2
Jaundice	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	1	1	..	1	..	1	..	..	..	..	..	..	2	4	6
Kidney Disease	.	..	..	..	..	..	..	..	1	..	..	..	..	1	..	..	1	..	..	1	3	1	2	..	5	1	..	1	..	..	..	..	12	5	17
Addison's Disease	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M.	F.	M	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M	F.	M	F.	M.	F.	M.	F.	Total
Kidney Diseases, Bright's Dis.	1										1	3		3	6	9	10	12	11	7	23	19	18	13	9	10	8	7					87	83	170
Laryngismus Stridulus	1																																1		1
Laryngitis		1				1		1		3						1	1		1														2	7	9
Leucocythemia																1	1																1	1	2
Liver Disease		1											1		1			1		2	1	3	1		1	4		1					5	12	17
Amyloid Degeneration																		1																1	1
Atrophy																			1														1		1
Cirrhosis															1		2	1	3	3	4	1	4	5	2	1	1						17	11	28
Hypertrophy																			2	1						1							2	2	4
Inflammation		2							1						1	1		1		1	2	1		3	1	1							5	10	15
Locomotor Ataxia																					2	1	2	1									4	2	6
Lung Diseases	2																1		1				1		1	1							6	1	7
Gangrene																				1														1	1
Œdema																1			1		3	1		1		1	1	1					5	5	10
Malformation of Heart	8	3																															8	3	11
Spina Bifida		1																																1	1
Unspecified	3	1																															3	1	4
Malignant Pustule																								1										1	1
Malnutrition	11	10																															11	10	21
Marasmus, Gen							2		1							1						1		1									3	3	6
Infantile	33	21	3	2	1																												37	23	60
Senile																										2		2						4	4
Measles	5	6	8	4	1			3												1													14	14	28
Meningitis	21	22	9	10		7	4	3	7	1	3	3	2	4	3	2	5	3	2	3	1		2	3	1								60	61	121
Cerebro-Spinal	2	4	3		1	1		1		1	2	1			1				1														10	8	18
Spinal	3	3		1	1																		1										5	4	9

TABLE VIII.—CAUSES OF DEATH, 1892.—Continued.

CAUSES OF DEATH.	Under 1.		1 and under 2		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Meningitis, Tubercular	8	4	8	2	5	3	2	2	2	1	1	2																					26	14	40
Menorrhagia																		1															...	1	1
Myelitis											1				1			1	1	2	1												4	3	7
Necrosis of Spine										1								1															...	2	2
Nephritis	1						1				1		1		3	4	3	5	2	3	5	1	3	3	2	7	3	2					25	25	50
Nervous Prostration																	1	1															1	1	2
Neuralgia																				1													...	1	1
Neurasthenia														1																			...	1	1
Obstipation		1																			2						1						3	1	4
Obstruction of Gall Duct								1																									...	1	1
Œdema Glottidis				1			1																										1	1	2
Old Age																							3	7	26	48	57	79	9	27			95	161	256
Opium Habit																					1	1	1										2	1	3
Ophthalmia		1																															...	1	1
Ovariotomy																								1									...	1	1
Paralysis															1	1	3	1	6	4	5	9	11	14	20	13	3	8		1			49	51	100
Pancreatis																			1														1	...	1
Paraplegia																				1													...	1	1
Paresis																					2	1	1	1									3	2	5
Parotitis																			1														1	...	1
Pericarditis									1										2		1					1							4	1	5
Peritonitis, Acute	1	1	1		1			1		2	5	2	4	2	3	13	2	5	1	5	2	1	4	1		1		2				1	24	37	61
Pharyngitis								1																									...	1	1
Phlebitis																		1															...	1	1

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Pleurisy		1						1							2	1	4		3	2	2	1	4	6	2	1	1						18	13	31
Pneumonia	40	34	26	12	10	7	6	4	5	5	3	6	6	4	27	11	33	36	45	29	29	41	54	55	29	41	12	25	1	4	4	1	330	315	645
Pott's Disease											1	1									1												2	1	3
Prostate Disease																					1		2		2								5	...	5
Purpura Hemorrhagica																	1																1	...	1
Pyæmia																	1	1															1	1	2
Rachitis				1																													...	1	1
Rheumatism	1							1	1	1	2	2			3	1	1	1		3	3	2	1	3	2	5							14	19	33
Acute				1					2	2			1			1	1	2	1					1									5	7	12
Chronic																							1	1		1							1	2	3
Scarlatina	5	5	2	6	5	7	8	3	13	7	3	1	2																				38	29	67
Scrofula	5	1		1		1				1	1															1							6	5	11
Septicæmia										1		1					1	3			1	3		1			2						4	9	13
Shock																		1															...	1	1
Skin Disease, Eczema	1	2																															1	2	3
Elephantiasis																						1											...	1	1
Small Pox			1					1							2																		3	1	4
Spinal Diseases				1											1	2	1			1				1									2	5	7
Stomach Diseases		1														1		1			1												1	3	4
Ulceration															1	1		2			2			1									3	4	7
Stomatitis	1	2					1					1																					2	3	5
Strictures					1																												1	...	1
of Œsophagus																								1									...	1	1
of Rectum																	1			1													1	1	2
Suicide by Chloroform																			1														1	...	1
by Coal Gas																	1																1	...	1

Table VIII.—CAUSES OF DEATH, 1892.—Continued.

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Suicide by Cutting Throat	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
by Drowning	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	..	2
by Hanging	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	...	1	1
by Opium and Morphine	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	2	1	3
by Shooting	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	2	...	2
Unspecified	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	2	1	1	..	..	1	..	..	..	..	..	..	6	2	8
Syncope	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	...	2
Synovitis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	...	1	1
Syphilis	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	2	..	..	2	..	2	..	..	..	..	..	..	..	..	..	..	3	4	7
Congenital	4	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	4	3	7
Tabes Dorsalis	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	...	2
Mesenterica	4	9	..	..	..	..	..	..	..	..	2	1	..	..	..	3	1	1	2	1	..	1	..	1	..	..	..	..	..	..	..	..	9	17	26
Teething	6	6	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	9	9	18
Tetanus	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	..	..	..	1	..	..	..	..	..	..	..	..	..	4	...	4
Thrombosis	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1
Tonsillitis	..	2	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	2	3	5
Trismus Nascentium	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	2
Tuberculosis	4	2	1	1	..	..	..	1	1	1	..	2	2	4	5	12	1	2	2	2	2	1	1	3	..	..	..	..	..	..	..	..	19	31	50
Tumors of Abdomen	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	1	2	..	2	..	..	..	..	..	..	..	..	1	6	7
Bladder	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	...	1
Brain	1	..	..	..	1	..	..	..	..	..	1	..	..	..	..	1	1	1	1	..	..	1	1	..	1	..	..	..	..	..	..	..	7	3	10
Kidney	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	...	1	1
Liver	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	1	1	2
Neck	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	...	1	1

CAUSES OF DEATH.	Under 1.		1 and under 2.		2 to 3.		3 to 5.		5 to 10.		10 to 15.		15 to 20.		20 to 30.		30 to 40.		40 to 50.		50 to 60.		60 to 70.		70 to 80.		80 to 90.		90 and over.		Age not stated.		SEX.		
	M	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M	F.	M.	F.	M	F.	M.	F.	M.	F.	M.	F.	Total.
Ovary																1				3				2									...	6	6
Testicles																					1												1	...	1
Uterus																								1									...	1	1
Unspecified		1																			1	2		1	1	1							2	5	7
Ulcers																								1									...	1	1
Uræmia					1										1	1	2		1	2	2	3	1	1	1		1	1					10	8	18
Uterine Disease																2		1															...	3	3
Whooping Cough	7	8	2	4	1	1		1								1																	10	15	25
Unknown	3	4	1	1	1		1		2	1							1	4		1	1	1	1	2	1	1		1					12	16	28

TABLE IX.—CLASSIFICATION AND PERCENTAGE, 1892.

Ratio of Mortality in the State, and in each Division, ascribed to each Cause and Class of Causes.

Number of Deaths in each Division of the State.												Percentage of Deaths in each Division.								
Bristol County.	Kent County.	Newport Co. Towns.	Newport City.	Providence County Towns.	Pawtucket.	Providence City.	Woonsocket.	Washington County.	Whole State.	CAUSES OF DEATH.	Percentage in the Whole State.	Washington County.	Woonsocket.	Providence City.	Pawtucket.	Providence County Towns.	Kent County.	Newport County Towns.	Kent County.	Bristol County.
232	598	187	404	1,556	642	2.964	445	368	73,96	All Causes	100.00	100.00	100.00	100 00	100.00	100.00	100.00	100.00	100.00	100.00
232	598	187	403	1,546	641	2,950	445	366	73,68	Causes Specified	99.62	99.46	100.00	99.53	99.85	99.35	99.75	100.00	100.00	100.00
...	..	...	1	10	1	14	...	2	28	Causes Unspecified	.38	.54	.....	.47	.15	.65	.25	......	......	......
										CLASSES.										
47	169	39	93	405	180	713	120	82	1,848	I. ZYMOTIC DISEASES	24,97	22.28	26.97	24.06	28.03	26.02	23.02	20 84	28 26	20.26
50	94	24	67	237	86	535	71	56	1,220	II. CONSTITUTIONAL DISEASES	16.50	15.22	15 95	18.04	13.40	15.22	16.58	12 83	15.72	21.54
103	243	80	184	653	270	1,234	176	155	3,098	III. LOCAL DISEASES	41.89	42 13	39.55	41.63	43 05	41.97	45.55	42.79	40 64	44 40
22	73	31	43	178	79	293	62	61	842	IV. DEVELOPMENTAL DISEASES	11.39	16.57	13.93	9.89	12.31	11.45	10.64	16.57	12.20	9 49
10	19	13	17	83	27	189	16	14	388	V. VIOLENCE AND OTHERWISE	5 25	3.80	3 60	6.38	4.21	5.34	4.21	6.96	3.18	4.31
										ORDERS										
										CLASS I.										
45	161	36	87	386	179	673	118	76	1,761	Miasmatic	23 80	20.65	26.51	22.71	27.88	24.81	21.52	19.25	26.92	19 40
...	7	2	...	5	. .	12	1	1	28	Enthetic	.38	.27	.23	.41	......	33	......	1.06	1.17	......
2	1	1	6	14	1	28	1	5	59	Dietic	.79	1.36	.23	.94	.15	.88	1.50	.53	.17	.86

										CLASS II.										
14	33	11	25	57	25	106	13	21	305	Diathetic.	4.14	9.51	2.90	3.56	3 90	3 68	6 19	5.88	5.52	6.03
36	61	13	52	180	61	429	58	35	915	Tubercular.	12 36	5.71	13.05	14.58	9.40	11.54	10 39	6.95	10.20	15 51
										CLASS III.										
28	76	26	51	198	66	289	54	39	827	Dis. of Nervous System.	11.17	10 60	12 13	9.75	10 28	12.72	12.62	13.90	12.72	12.09
22	47	21	27	97	44	203	22	26	509	Dis of Circulatory System.......	6.87	7.07	4.94	6.85	6.80	6.24	6.69	11.29	7.86	9 48
29	74	20	63	215	97	427	63	43	1,031	Dis. of Respiratory Organs	13.95	11 69	14.15	14.42	15.11	13 83	15.59	10.69	12.38	12.50
13	31	5	18	72	35	149	22	19	364	Dis. of Digestive Organs.	4 94	5.16	4.94	5 03	5.45	4.61	4.46	2 66	5 17	5.59
10	14	5	23	63	22	150	12	26	325	Dis. of Urinary Organs	4 39	7.07	2 70	5.07	3 43	4.05	5.69	2.66	2.34	4.31
..	1	2	1	2	1	7	..	...	14	Dis. of Reproductive Organs.. ..	.19	.....	....	.22	.15	.13	.25	1 06	.17	......
1	...	1	...	4	3	6	2	..	17	Dis. of Os. and Locomo. System.	.23	......	.46	.20	.46	.26	......	.53	......	43
...	.	...	1	2	2	2	1	2	10	Dis. of Integumentary System. ..	.14	.54	.23	.06	.31	.13	.25	.....	......	......
...	...	...	...	....	...	1	...	...	1	Dis. of Org. of Hearing and Sight	.01	.....	......	.03	......	......	......	......	......	....
										CLASS IV.										
11	36	12	9	78	29	169	43	15	402	Developmental Dis. of Children..	5.44	4.07	9.66	5.70	4.51	5.01	2.23	6.42	6.02	4 75
1	6	1	1	10	2	18	2	6	47	Developmental Dis. of Women ..	.62	1 63	.46	.61	.30	.65	.25	.53	1.00	.43
9	24	15	14	49	33	71	9	32	256	Developmental Dis. of Old Age..	3.47	8.70	2.02	2.39	5.17	3.16	3.46	8.03	4.01	3 88
1	7	3	19	41	15	35	8	8	137	Developmental Dis of Nutrition.	1.86	2.17	1.79	1.19	2.33	2 63	4.70	1.59	1.17	.43
										CLASS V.										
8	13	9	12	63	22	158	15	9	309	Accident and Negligence ...' ...	4.18	2.45	3.37	5.34	3.44	4.05	2.96	4.84	2.18	3.45
...	...	...	...	......	.	4	...	...	4	Homicide.................... .	.05	......	......	.13	.....	......	.....	......	......	......
...	..	2	2	3	2	8	1	1	19	Suicide.....	.26	.27	.23	.27	.31	.20	.50	1 06	. ..	. ..
2	6	2	3	17	3	19	..	4	56	Otherwise.................... ...	.76	1.08	.....	.61	.46	1.09	.75	1 06	1.00	.86
										CLASS I.—ZYMOTIC.										
										Order One —Miasmatic Diseases.										
..	...	...	1	3	...	....	...	...	4	Carbuncle	.05	.....	.....	.....	......	.20	.25	......	......	......
18	77	12	31	160	71	201	50	13	632	Cholera Infantum.	8.56	3.53	11.26	6.80	11.06	10.27	7 67	6.42	12 89	7.74
...	2	1	..	7	7	13	3	...	33	Cholera Morbus.	.45	......	.69	.44	1.09	.45	......	.53	.34	......
1	10	1	20	12	2	33	7	3	89	Croup (Pseudo Membranous). ...	1.19	.81	1.56	1.02	.31	.78	4 96	.53	1.67	.43

TABLE IX.—CLASSIFICATION AND PERCENTAGE, 1892.—Continued.

NUMBER OF DEATHS IN EACH DIVISION OF THE STATE.												PERCENTAGE OF DEATHS IN EACH DIVISION.								
Bristol County.	Kent County.	Newport Co. Towns.	Newport City.	Providence County Towns.	Pawtucket.	Providence City.	Woonsocket.	Washington County.	Whole State.	CAUSES OF DEATH.	Percentage in the Whole State.	Washington County.	Woonsocket.	Providence City.	Pawtucket.	Providence County Towns.	Newport City.	Newport County Towns.	Kent County.	Bristol County.
5	8	3	...	36	11	58	5	2	128	Diarrhœa	1.74	54	1.13	1.73	1.72	2.29	.....	1.59	1 34	2.15
1	1	1	7	15	7	39	1	17	89	Diphtheria	1.19	4.61	.23	1.22	1.09	.94	1.75	.53	.17	.43
1	6	1	4	15	2	31	7	4	71	Dysentery	.96	1.09	1.56	.96	.31	.94	1.00	.53	1.00	.43
1	1	...	1	10	3	8	1	...	25	Erysipelas	.34	.....	.23	.27	.46	.65	.25	.....	.17	.43
...	1	1	2	4	1	9	...	...	18	Fever, Cerebro-Spinal	.24	.....	.....	.29	.15	.26	.50	.53	.17	.....
...	...	...	...	5	3	1	...	...	9	Fever, Intermittent	.12	.....	.....	.03	.46	.33	.....	.....	.....	.....
...	4	..	2	7	4	8	...	...	25	Fever, Malarial	.34	.....	.....	.27	.62	.45	.50	.....	.67	.....
...	...	...	...	...	...	2	...	...	2	Fever, Remittent	.03	.....	.....	.06	.....	.....	.....	.....	.....	.....
5	12	4	5	27	15	51	7	7	133	Fever, Typhoid	1 81	1 90	1.56	1.50	2 33	1.72	1.25	2.14	2.01	2.15
...	1	...	...	3	...	1	1	...	6	Fever, Unspecified	.08	.....	23	.03	.....	.20	.....	.....	.17	.....
11	27	8	5	61	36	144	18	26	336	Influenza (Epidemic)	4.54	7.07	4.06	4 85	5.60	3 92	1.25	4.28	4 52	4.75
...	2	2	2	1	...	11	10	...	28	Measles	.38	.....	2.25	.34	.....	.06	.50	1.06	.34	.....
1	...	...	..	.....	..	.....	...	...	1	Mumps	.01	.....	.....	.....	.....	.....	.....	.....	.....	.43
...	4	1	...	5	4	11	1	4	30	Metria (Puerperal Fever)	.41	1.08	.23	.34	.62	.33	.....	.53	.67	.....
...	...	...	...	1	2	2	...	..	5	Tonsillitis	.07	.....	.....	.06	.31	.06	.....	.....	.....	.....
1	4	...	4	9	5	38	6	...	67	Scarlatina	.91	.....	1.35	1 19	.78	.58	1 00	.....	.67	.43
...	...	1	..	.....	..	3	...	...	4	Small Pox	.05	.....	.....	.09	.....	.....	.....	.53	.....	.....
...	1	...	3	5	6	9	1	...	25	Whooping Cough	.34	.....	.23	.29	.94	.33	.75	.....	.17	.....
										Order Two.—Enthetic Diseases.										
...	..	...	...	.....	...	1	...	...	1	Malignant Pustule	.01	....	....	.03	.....	.....	.....	.....	....	.....
...	3	2	...	3	...	3	1	1	13	Septicæmia	.17	.27	.23	.09	.....	.20	.....	1.06	51	.....
...	4	...	...	2	...	8	...	...	14	Syphilis	.19	.....	.....	.27	.....	.13	.....	.....	.67	.....

										Order Three.—Dietic Diseases.										
...	...	...	4	8	1	14	...	2	29	Alcoholism	.39	54	.....	.46	.15	.52	1.00	.....	.....	.....
1	..	...	...	3	...	3	...	...	7	Delirium Tremens	.09	.....	.....	.09	.....	.20	.....	.....	.....	.43
1	1	1	2	3	...	10	1	3	22	Inanition	.30	.81	23	.34	.....	.20	.50	.53	.17	.43
...	...	...	...	...	...	1	...	...	1	Purpura and Scurvy	.01	.....	.....	.03	.....	.....	.....	.....	.....	.....
										CLASS II.—CONSTITUTIONAL.										
										Order One.—Diathetic Diseases.										
...	3	...	2	4	1	4	1	1	16	Anæmia	.22	.27	.23	.13	.15	.26	50	.....	.51	.....
4	9	4	5	12	6	31	3	8	82	Cancer, Various	1 12	2 17	.69	1 04	.94	..78	1.25	2 14	1.51	1.72
1	2	...	1	4	9	11	...	1	29	Cancer of Breast	.39	.27	.....	.37	1.40	.26	.25	.....	.34	.43
2	...	1	1	4	1	4	1	...	14	Cancer of Liver	.19	.....	.23	.13	.15	26	.25	.53	.....	.86
...	2	..	1	12	..	16	1	1	33	Cancer of Stomach	.45	.27	.23	.54	.....	.78	.25	.....	.34	.....
...	3	...	3	1	1	13	2	...	23	Cancer of Uterus	.31	.....	.46	.44	.15	.06	.75	.....	.51	.....
4	4	4	3	7	2	5	4	6	39	Dropsy	.53	1 63	.89	.17	.31	.45	.75	2.14	67	1.72
2	3	1	2	7	...	4	...	2	21	Mortification	.28	.54	.....	.13	.....	.45	.50	.53	.51	.86
1	7	1	7	6	5	18	1	2	48	Rheumatism	.63	.54	.23	.58	.78	.39	1 75	.53	1.17	.43
										Order Two.—Tubercular Diseases.										
1	4	...	...	2	1	13	1	...	22	Hydrocephalus	.30	.....	.23	.44	.15	.13	.....	.....	.67	.43
29	51	11	34	163	51	342	51	27	759	Phthisis (Pulmonalis)	10.26	7.34	11.44	11.52	7.95	10.54	8.42	5 90	8.53	12.50
3	1	...	3	1	3	4	3	...	18	Scrofula	.24	.....	69	.13	.46	.06	.75	....	.17	1.29
...	2	1	...	6	..	14	1	2	26	Tabes Mesenterica	.35	.54	.23	.47	.....	.39	.....	.53	.34	.....
...	1	...	4	2	3	27	1	2	40	Tubercular Meningitis	.54	.54	.23	91	.46	.13	1.00	.....	.17	.....
3	2	1	1	6	3	29	1	4	50	Tuberculosis	.66	1.08	.23	.97	.46	.39	25	.53	.34	1 29
										CLASS III.—LOCAL.										
										Order One.—Diseases of the Nervous System.										
8	17	5	18	50	25	100	2	13	238	Apoplexy	3.23	3.53	.46	3.36	3.90	3 22	4 46	2.66	2.84	3.45
...	...	...	1	....	...	3	...	2	6	Cerebritis	.08	.54	.....	.09	.....	.....	25	....	.....	.....
5	23	3	4	46	16	51	10	4	162	Convulsions	2.20	1.08	2.25	1.71	2.48	2 96	1 00	1 59	3 84	2 16
2	15	6	11	31	15	56	22	3	161	Encephalitis	2.18	.81	5.39	1.87	2.33	1 98	2 75	3 21	2 51	.86
...	1	1	1	13	2	7	...	.	25	Epilepsy	.34	....	.....	.23	.31	.82	.25	.53	.17	....
3	1	...	...	8	...	14	...	1	27	Insanity	.37	.27	.....	.46	.....	.52	.....	.....	.17	1.29
4	12	7	9	29	4	34	14	11	124	Paralysis	1.69	2 98	3.60	1.16	.62	1.85	2.25	3.74	2.01	1.72

TABLE IX.—CLASSIFICATION AND PERCENTAGE, 1892.—Continued.

NUMBER OF DEATHS IN EACH DIVISION OF THE STATE.												PERCENTAGE OF DEATHS IN EACH DIVISION.								
Bristol County.	Kent County.	Newport Co. Towns.	Newport City.	Providence County Towns.	Pawtucket.	Providence City.	Woonsocket.	Washington County.	Whole State.	CAUSES OF DEATH.	Percentage in the Whole State.	Washington County.	Woonsocket.	Providence City.	Pawtucket.	Providence County Towns.	Newport City.	Newport County Towns.	Kent County.	Bristol County.
...	...	...	2	1	2	1	...	..	6	Tetanus ..	.08	.....	.....	.03	.31	.06	.50	......	......	......
6	7	4	5	20	2	23	6	5	78	*Brain Diseasee*	1.06	1.36	1.35	.79	.31	1.29	1.25	2.14	1.17	2.56
										Order Two.—Diseases of the Circulatory System.										
...	...	...	...	...	...	3	...	...	3	Aneurism ..	.04	......	......	.09	......	.....	......	......	......	....
...	...	...	...	3	3	12	...	1	19	Pericarditis	.26	.27	.....	.41	.46	.20	......	.....	.....	......
22	47	21	27	94	41	188	22	25	487	*Heart Diseases*	6 57	6.80	5 39	6.35	6.40	6 04	6.69	11.29	7.86	9.48
										Order Three.—Diseases of the Respiratory Organs.										
1	1	...	2	4	...	3	1	..	12	Asthma ..	.17	......	.23	.09	.. ..	.26	.50	.....	.17	.43
4	10	1	17	58	42	107	12	6	257	Bronchitis, Acute	3.49	1.63	2.70	3.59	6 55	3.74	4.21	.53	1.67	1.72
1	5	1	2	13	4	23	1	1	51	Bronchitis, Chronic.	.67	.27	.23	.79	.62	.82	.50	.53	.83	.43
...	...	...	2	4	...	5	1	...	12	Laryngitis	.17	......	.23	.17	......	.26	.50	.....	....	......
3	1	2	3	6	8	10	...	1	34	Pleurisy.	.46	.27	......	.34	1.25	.39	.75	1.06	.17	1.29
18	57	15	37	127	41	277	48	35	655	Pneumonia	8.85	5.71	10.79	9 31	6.40	8 15	9.14	8.03	9.54	7.74
2	...	1	...	3	2	2	...	...	10	*Lung Diseases*	.14	.....	......	.06	.31	.20	......	.53	......	.86
										Order Four —Diseases of the Digestive Organs.										
...	...	...	...	1	...	· 2	..	...	3	Ascites.	.04	......	.....	.06	.... .	.06	.. .	......	.....	......
1	5	...	2	10	6	37	8	4	73	Enteritis	.99	1.08	1.79	1.24	.94	.65	.50	.. ..	.83	.43
1	7	3	5	7	3	24	2	1	53	Gastritis	.70	.27	.46	.81	.46	.45	1 25	1.59	1 17	.43

...	...	...	..	4	2	9	...	...	15	Hepatitis	.20	...	...	.29	.31	26	...	...	...	...
2	...	...	2	5	2	9	1	1	22	Hernia	.30	.27	.23	.29	.31	.33	.50	...	...	.86
2	3	1	...	3	3	5	...	4	21	Ileus	.28	1.08	...	.17	.46	.20	...	.53	.51	.86
...	1	...	1	1	...	1	...	.	4	Intestines, Ulceration of	.05	...	...	.03	...	.06	.25	...	.17	...
...	1	...	...	1	1	...	...	...	3	Intestines, Stricture of	.04	...	...	...	.15	.06	...	...	.17	...
...	...	...	...	1	...	1	...	...	2	Intussusception	.03	...	...	.03	...	.06	...	...	...	...
2	1	...	...	3	1	6	...	...	13	Jaundice	.18	...	...	.20	.15	.20	...	...	.17	.86
4	6	1	1	15	10	17	4	4	62	Peritonitis	.83	1.08	.89	58	1 56	.94	.25	.53	1.00	1.72
...	3	...	1	8	2	2	1	.	17	*Bowel Diseases*	.23	...	.23	.06	.31	.52	.25	...	.51	...
1	4	...	4	8	4	30	5	5	61	*Liver Diseases*	.81	1.36	1.13	.99	.62	.52	1.00	...	.67	.43
...	...	...	...	...	...	1	...	..	1	*Pancreas Diseases*	.01	...	...	.03	...	...	...	...	...	...
..	...	...	2	5	1	5	1	...	14	*Stomach Diseases*	.19	...	.23	.17	.15	.33	.50	...	...	...
										Order Five.—Diseases of the Urinary Organs.										
...	1	...	...	1	1	...	...	1	4	*Bladder Diseases*	.05	.27	...	...	.15	.06	...	...	.17	...
...	1	1	2	4	1	6	...	3	18	Cystitis	.24	.81	...	.20	.15	.26	.50	.53	.17	...
1	...	...	1	9	5	12	3	6	37	Diabetes	.51	1.63	.69	.41	.78	.58	.25	...	...	.43
...	...	...	...	1	...	1	...	..	2	Ischuria	.03	...	...	.03	...	.06	...	...	...	...
1	2	1	...	7	1	20	4	2	38	*Kidney Diseases*	.42	.54	.89	.62	.15	.45	...	.53	.34	43
1	1	1	10	4	5	26	1	1	50	Nephritis	.66	.27	23	86	.78	.26	2.50	.53	.17	.43
7	8	2	10	35	9	82	4	13	170	Nephria (Bright's Disease)	2.31	3.53	.89	2.75	1 40	2.23	2 50	1.06	1.34	3.02
...	1	...	...	1	...	3	..	...	5	Prostate, Disease of	.07	...	...	.09	...	.06	...	...	.17	...
...	..	...	...	1	...	...	...	...	1	Testicles, Diseases of	.01	...	...	...	...	.06	...	...	...	...
										Order Six.—Diseases of the Generative Organs. Female.										
...	..	...	1	1	...	4	...	...	6	Ovarian Dropsy	.08	...	...	.13	...	.06	.25	...	...	...
...	1	2	...	1	1	3	...	...	8	*Diseases of Uterus*	.09	...	...	.09	.15	.06	...	1.06	.17	...
										Order Seven.—Osseous and Locomotory System										
...	...	...	...	...	1	1	...	...	2	Bones, Diseases of	.03	...	...	.03	.15	...	...	...	...	...
...	...	1	...	4	...	1	..	..	6	*Joint Diseases*	.08	...	...	.03	...	.26	...	.53	...	...
1	...	...	...	...	2	4	2	...	9	Vertebræ, Diseases of	.12	...	.46	.13	.31	...	...	...	...	.43

TABLE IX.—CLASSIFICATION AND PERCENTAGE, 1892.—Continued.

NUMBER OF DEATHS IN EACH DIVISION OF THE STATE.												PERCENTAGE OF DEATHS IN EACH DIVISION.								
Bristol County.	Kent County.	Newport Co. Towns.	Newport City.	Providence County Towns.	Pawtucket.	Providence City.	Woonsocket.	Washington County.	Whole State.	CAUSES OF DEATH.	Percentage in the Whole State.	Washington County.	Woonsocket.	Providence City.	Pawtucket.	Providence County Towns.	Newport City.	Newport County Towns.	Kent County.	Bristol County.
										Order Eight.—Integumentary System.										
...	...	...	..	1	1	...	1	2	5	Phlegmon	.07	.54	23	......	.15	.06	......	......	....	......
...	...	...	1	....	...	...	...	...	1	Ulcer	.01	......	.....	.....	......	.....	.25	.....	...	..
...	...	...	...	1	1	2	...	...	4	*Skin Diseases*	.05	.....	...	.06	.15	.06	.....	.....	.....	.....
										Order Nine.—Organs of Special Sense. Eye and Ear.										
...	...	...	...	......	..	1	...	...	1	Opthalmitis	.01	......	......	.03	......	......	....	......	......	......
										CLASS IV.—DEVELOPMENTAL.										
										Order One.—Developmental Diseases of Children.										
...	1	...	2	4	...	10	1	1	19	Cyanosis	.26	.27	.23	.34	......	.26	.50	......	.17	......
3	12	2	2	38	9	11	33	8	118	Debility, Infantile	1.60	2.17	7.43	.37	1.40	2.43	.50	1.06	2.01	1.29
2	14	2	...	17	11	75	4	2	127	Debility, Premature Birth	1.72	.57	.89	2.54	1.72	1 09	......	1.06	2.35	.86
5	5	7	4	14	8	55	3	3	104	Innutrition	1.40	.81	.69	1.83	1.28	.88	1.00	3.74	.83	2.15
...	...	1	...	......	...	..	...	...	1	Spina Bifida	.01	....	.....	....	......	.....	......	.53	....	......
...	3	...	...	2	1	9	...	...	15	Other Malformations	.20	......	......	29	.15	.13	......	.....	.51	... ..
1	1	..	1	3	..	9	2	1	18	Teething	.24	.27	.46	.29	.....	.20	.25	......	.17	.43

										Order Two.—Developmental Diseases of Women.										
1	5	1	1	10	2	18	2	5	45	Childbirth	.61	1.36	.46	.61	.31	.65	.25	.53	.83	.43
...	1	...	...	...	...	...	...	1	2	Paramenia	.03	.27	...	...	...	...	...	...	.17	...
										Order Three.—Developmental Diseases of Old People.										
9	21	15	14	49	33	71	9	32	56	Old Age	3.47	8.70	2.02	2 39	5.14	3.16	3.46	8.03	4 02	3.88
										Order Four.—Diseases of Nutrition. Adolescent and Adult.										
...	...	...	1	3	...	6	...	...	10	Atrophy	.14	...	...	.20	...	.20	.25	...	...	...
1	7	3	18	38	15	29	8	8	127	Debility	1.72	2.17	1.79	.99	2.33	2.43	4.45	1.59	1.17	.43
										CLASS V.—VIOLENT DEATHS.										
										Order One.—Accident or Negligence.										
2	...	1	1	7	1	8	...	1	21	Bones and Scalds	.28	.27	...	.27	.15	.45	.25	.53	...	.86
5	3	2	4	13	2	13	3	3	48	Drowning	.63	.81	.69	.44	.31	.82	1.00	1.06	.51	2.15
...	...	...	...	4	1	25	3	...	33	Falls	.45	...	.69	.75	.15	.26	...	...	...	...
1	1	...	2	9	7	38	2	...	60	Fractures and Contusions	.79	...	.46	1.19	1.09	.58	.50	...	.17	.43
...	1	...	3	2	...	16	...	1	23	Poison	.32	.27	...	.51	...	.13	.75	...	.17	...
...	2	...	...	8	2	11	4	2	29	Railroad	.40	.51	.89	.37	.31	.52	...	...	.34	...
...	2	1	...	8	5	9	1	...	26	Suffocation	.35	...	.23	.29	.78	.52	...	.53	.34	...
...	4	5	2	12	4	38	2	2	69	Various and Otherwise	.93	.54	.46	1.19	.62	.76	.50	2.66	.67	...
...	...	...	...	...	...	4	...	...	4	*Order Two.—Homicide.*	.05	...	...	.13	...	...	...	...	...	...
...	...	2	2	3	2	8	1	1	19	*Order Three.—Suicide.*	.26	.27	.23	.27	.31	.20	.50	1.06	...	...
										Order Four.—Various.										
2	6	2	2	7	2	5	...	2	28	Unclassified	38	.54	...	.17	.31	.45	.50	1.06	1.00	.86
...	...	.	1	10	1	14	...	2	28	Causes not Specified	.38	.54	...	.46	.15	.65	.25	...	...	...

TABLE X.—*Causes of Deaths Registered in Rhode Island,*

Class.	CAUSES OF DEATH.[1]	1853.	1854.	1855.	1856.	1857.	1858.	1859.
	ALL CAUSES	1,291	1,806	1,970	2,225	2,510	2,793	2,447
	SPECIFIED CAUSES	1,176	1,655	1,782	1,919	2,222	2,483	2,184
	[CLASSES.]							
I.	ZYMOTIC DISEASES	348	596	457	567	570	716	512
II.	CONSTITUTIONAL DISEASES	349	553	479	447	573	620	598
III.	LOCAL DISEASES	276	329	434	475	563	614	564
IV.	DEVELOPMENTAL DISEASES	140	221	338	369	434	446	421
V.	VIOLENT DEATHS	63	56	74	61	82	87	89
	[ORDERS.]							
I.	1. MIASMATIC DISEASES	331	580	441	548	537	676	472
	2. ENTHETIC DISEASES	2	......	2	3	......	4	12
	3. DIETIC DISEASES	14	11	8	15	29	26	23
	4. PARASITIC DISEASES	1	5	6	1	4	10	5
II.	1. DIATHETIC DISEASES	67	58	68	83	106	112	96
	2. TUBERCULAR DISEASES	282	395	411	359	467	508	502
	DISEASES OF—							
III.	1. NERVOUS SYSTEM	130	161	181	185	221	223	217
	2. ORGANS OF CIRCULATION	29	40	66	43	67	67	64
	3. RESPIRATORY ORGANS	67	73	103	151	164	198	161
	4. DIGESTIVE ORGANS	34	43	57	67	68	93	88
	5. URINARY ORGANS	6	4	13	10	26	17	23
	6. ORGANS OF GENERATION	5	4	3	5	2	7	......
	7. ORGANS OF LOCOMOTION	3	1	2	7	6	6	9
	8. INTEGUMENTARY SYSTEM	2	3	9	7	9	3	2
	DEVELOPMENTAL DISEASES OF—							
IV.	1. CHILDREN	54	119	198	221	249	253	247
	2. WOMEN	10	7	9	14	13	24	14
	3. OLD PEOPLE	58	67	84	76	119	114	117
	4. DISEASES OF NUTRITION	18	28	47	58	53	55	45
V.	1. ACCIDENT OR NEGLIGENCE	57	53	57	56	73	73	79
	2. BATTLE	......	......	......	......	......	......	......
	3. HOMICIDE	3	.....	9	1	1	1	1
	4. SUICIDE	3	3	8	4	8	13	9
	CAUSES ILL-DEFINED	15	20	19	14	30	14	22
	CAUSES NOT STATED	100	131	169	292	258	296	241

---

[1] Stillborns included in this table.

for each of the Forty years, 1853 to 1892.

1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.
2,853	3,073	2,714	3,318	3,498	3,582	3,142	3,052	3,124	3,602	3,472	3,567	4,449	4,631	4,506
2,628	2,853	2,505	3,081	2,255	3,335	2,938	2,827	2,788	3,251	3,276	3,275	3,986	4,344	4,297
644	771	599	1,068	1,158	1,244	768	585	602	878	793	730	1,117	1,238	1,242
698	729	702	713	687	744	725	748	718	814	834	808	868	879	786
715	788	674	748	816	717	808	837	786	848	885	975	1,167	1,242	1,283
436	457	423	427	478	497	505	525	567	589	627	635	688	829	836
135	108	107	125	116	103	132	122	115	122	137	127	146	156	150
707	724	565	1,019	1,113	1,224	750	569	582	853	761	694	1,083	1,215	1,203
2	5	4	6	5	2	6	6	3	2	6	6	10	4	11
29	34	21	36	31	10	7	11	11	20	20	19	23	14	25
6	8	6	7	9	8	5	9	6	3	6	11	1	5	3
131	126	122	141	123	139	132	123	130	144	167	151	187	198	155
567	603	580	572	564	635	593	625	588	670	667	657	681	581	634
245	287	231	272	294	281	293	316	274	319	339	365	423	450	418
73	108	113	99	124	99	117	115	116	128	120	146	190	193	217
215	224	175	217	236	208	239	214	235	239	235	269	313	322	349
136	101	112	104	114	86	111	120	87	97	116	117	136	154	172
29	27	25	35	28	26	29	43	46	46	48	57	77	85	85
1	9	1	3	1	4	1	1	2	......	1	......	5	3	3
5	15	8	9	7	5	5	6	12	11	15	5	11	18	15
11	17	9	9	12	8	13	22	14	8	11	16	12	17	24
255	244	210	205	220	280	261	270	298	293	339	311	350	462	490
13	19	23	21	23	18	24	26	22	27	28	34	36	29	44
116	132	143	161	193	152	178	188	206	217	204	232	233	254	223
52	62	47	40	42	47	42	41	41	52	56	58	69	84	79
119	93	91	104	106	90	119	102	97	105	105	108	126	145	128
......	......	7	3	2	1	1	......	......	......	......	......	......	......	......
4	3	1	5	2	......	1	5	......	2	5	......	2	3	4
12	12	8	13	6	12	11	15	18	15	27	19	18	8	18
37	18	21	20	34	40	33	30	48	51	59	43	87	70	57
188	202	188	217	209	207	171	195	288	300	137	249	376	217	152

TABLE X.—*Causes of Deaths Registered in Rhode Island,*

Class.	CAUSES OF DEATH.[1]	1875.	1876.	1877.	1878.	1879.	1880.	1881.
	ALL CAUSES	4,563	4,340	4,692	4,689	4,688	5,021	5,280
	SPECIFIED CAUSES	4,300	4,095	4,444	4,430	4,386	4,742	4,878
	[CLASSES.]							
I.	ZYMOTIC DISEASES	1,028	990	1,338	1,234	1,158	1,300	1,190
II.	CONSTITUTIONAL DISEASES	940	968	997	986	975	930	1,069
III.	LOCAL DISEASES	1,404	1,303	1,254	1,371	1,465	1,613	1,660
IV.	DEVELOPMENTAL DISEASES	757	681	693	680	661	742	777
V.	VIOLENT DEATHS	171	153	162	159	127	157	182
	[ORDERS.]							
I.	1. MIASMATIC DISEASES	992	946	1,296	1,202	1,128	1,269	1,151
	2. ENTHETIC DISEASES	11	12	17	10	12	10	8
	3. DIETIC DISEASES	18	27	17	16	16	21	29
	4. PARASITIC DISEASES	7	5	8	6	2	......	2
II.	1. DIATHETIC DISEASES	193	199	231	185	221	205	239
	2. TUBERCULAR DISEASES	747	769	766	801	754	725	830
	DISEASES OF—							
III.	1. NERVOUS SYSTEM	441	437	463	481	524	551	591
	2. ORGANS OF CIRCULATION	191	168	187	172	208	237	271
	3. RESPIRATORY ORGANS	495	429	322	430	418	508	464
	4. DIGESTIVE ORGANS	159	148	153	165	165	169	187
	5. URINARY ORGANS	85	69	98	92	113	119	110
	6. ORGANS OF GENERATION	1	2	4	1	......	7	3
	7. ORGANS OF LOCOMOTION	16	27	15	10	20	15	11
	8. INTEGUMENTARY SYSTEM	16	23	12	20	17	7	23
	DEVELOPMENTAL DISEASES OF—							
IV.	1. CHILDREN	416	332	362	868	326	326	410
	2. WOMEN	35	30	29	26	36	36	38
	3. OLD PEOPLE	216	241	213	222	220	273	247
	4. DISEASES OF NUTRITION	90	78	89	64	79	107	82
V.	1. ACCIDENT OR NEGLIGENCE	142	131	137	135	113	146	155
	2. BATTLE	......	......	.....	.....	......	......	......
	3. HOMICIDE	3	4	3	3	1	1	4
	4. SUICIDE	26	18	22	21	13	10	23
	CAUSES ILL-DEFINED	56	32	56	49	48	46	55
	CAUSES NOT STATED	207	213	192	210	254	233	347

---

[1] Stillborns included in this table.

for each of the Forty years, 1853 to 1892.—Continued.

1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	Total and Percentage for 40 Years, 1853-1892.	
5,327	5,535	5,413	5,660	6,142	6,616	6,889	6,588	7,230	6,892	7,739	170,929	100.00
5,011	5,327	5,352	5,541	6,052	6,562	6,815	6,500	7,142	6,823	7,677	162,140	94.86
1,170	1,077	1,145	1,074	1,311	1,764	1,644	1,374	1,755	1,523	1,842	41,130	24.06
1,051	1,136	1,119	1,194	1,226	1,084	1,214	1,165	1,281	1,174	1,220	34,731	20.32
1,756	2,024	1,961	2,205	2,357	3,498	2,663	2,635	2,784	2,801	3,098	53,396	31.24
819	905	906	870	945	992	1,078	1,083	1,051	1,051	1,185	26,764	15.66
215	185	221	201	213	224	216	243	271	274	332	6,119	3.58
1,119	1,012	1,075	1,008	1,251	1,684	1,563	1,273	1,660	1,428	1,755	39,359	23.03
17	21	30	19	23	33	40	25	33	24	28	474	.28
32	42	38	47	35	46	40	74	61	69	59	1,127	.65
2	2	2	......	2	1	1	2	1	2	......	170	.10
213	260	253	296	262	264	307	312	299	283	305	7,291	4.27
838	876	866	898	964	820	907	853	982	891	915	27,440	16.05
602	634	650	642	727	779	805	697	772	747	828	17,497	10.24
262	333	293	354	333	411	442	467	413	485	509	8,069	4.72
481	577	517	670	696	721	792	805	909	879	1,031	15,751	9.21
245	236	250	253	319	310	329	356	335	342	364	6,698	3.92
118	173	178	215	222	220	244	272	300	300	325	4,038	2.36
6	26	14	14	12	14	10	10	8	15	14	222	.12
25	26	32	34	26	23	15	18	25	20	17	556	.32
17	19	27	23	22	20	26	10	22	13	10	565	.33
408	456	448	453	502	539	596	598	587	626	641	14,223	8.33
22	44	39	28	31	29	33	27	26	23	47	1,057	.62
283	275	293	267	276	278	290	227	198	185	256	7,927	4.64
106	130	126	122	136	146	159	231	240	217	241	3,557	2.08
178	157	197	178	194	206	190	216	250	233	309	5,353	3.15
......	......	......	......	......	......	......	......	......	......	......	14	.01
6	3	2	3	2	2	5	3	2	1	4	105	.06
31	25	22	20	17	16	21	24	19	40	19	647	.38
45	22	19	57	39	35	46	49	45	35	34	1,550	.90
271	186	42	59	51	19	28	39	43	34	28	7,239	4.24

TABLE X.—Continued.

Class.	CAUSES OF DEATH.	1853.	1854.	1855.	1856.	1857.	1858.	1859.
I.	ORDER 1.							
	1. Small Pox[1]	14	11	5	9	.....	1	5
	2. Measles	.....	15	3	2	6	75	3
	3. Scarlet Fever	108	46	71	208	147	234	71
	4. Diphtheria	.....	.....	.....	.....	.....	6	20
	5. Cerebro Spinal Meningitis	.....	.....	.....	.....	.....	.....	.....
	6. Quinsy[2]	.....	.....	.....	.....	.....	.....	.....
	7. Croup	27	43	48	62	70	66	58
	8. Whooping Cough	2	14	4	19	9	13	46
	9. Typhoid Fever[3]	25	39	63	53	72	42	70
	10. Erysipelas	3	8	15	12	14	20	15
	11. Metria (Puerperal Fever)	2	2	6	10	8	7	11
	12. Carbuncle	.....	.....	.....	1	.....	.....	1
	13. Influenza	2	1	4	.....	15	6	2
	14. Diarrhœa	13	24	51	34	52	42	49
	15. Dysentery	88	118	71	51	65	61	53
	16. Cholera Infantum	39	68	91	77	70	93	61
	17. Cholera[4]	7	191	7	6	3	2	6
	18. Intermittent Fever	.....	.....	.....	1	.....	.....	.....
	19. Remittent Fever[5]	1	.....	2	3	2	4	1
	ORDER 2.							
	1. Syphilis	1	.....	1	2	.....	3	5
	2. Gonorrhœa	.....	.....	.....	.....	.....	.....	.....
	3. Hydrophobia	1	.....	.....	1	.....	.....	1
	4. Glanders	.....	.....	.....	.....	.....	.....	.....
	5. Malignant Pustule	.....	.....	1	.....	.....	1	6
	6. Septicæmia	.....	.....	.....	.....	.....	.....	.....
	ORDER 3.							
	1. Inanition	.....	1	.....	1	.....	.....	.....
	2. Puerpera and Scurvy	.....	.....	1	1	4	5	1
	3. Alcoholism, Delirium Tremens	6	5	4	5	10	13	7
	3. Alcoholism, Intemperance	8	5	3	8	15	8	15
	ORDER 4.							
	1. Thrush	1	4	5	1	3	9	3
	2. Worms	.....	1	1	.....	1	1	2
II.	ORDER 1.							
	1. Gout	.....	.....	.....	.....	.....	.....	.....
	2. Dropsy	45	31	32	50	48	44	41
	3. Anæmia	2	6	4	4	6	12	2
	4. Cancer	13	18	27	26	37	44	43
	5. Noma (Canker)	1	.....	.....	.....	.....	1	.....
	6. Mortification	4	2	3	4	8	7	3
	7. Rheumatism	2	1	2	4	7	4	7
	ORDER 2.							
	1. Scrofula	6	5	8	7	11	11	8
	2. Tabes Mesenterica	.....	.....	.....	.....	4	6	2
	3. Phthisis (Consumption)	243	349	345	305	400	426	436
	4. Hydrocephalus (Tubercular Meningitis)	33	40	58	47	52	65	56
	5. *Tuberculosis*	.....	1	.....	.....	.....	.....	.....
III.	ORDER 1.							
	1. Cephalitis	28	19	26	19	25	42	20
	2. Apoplexy	22	25	33	39	42	43	51
	3. Paralysis	12	6	20	9	21	21	28
	4. Insanity	4	6	8	14	16	14	16
	5. Chorea	.....	.....	.....	.....	1	.....	2
	6. Epilepsy	4	.....	8	6	8	9	6
	7. Tetanus	.....	3	3	4	6	1	3
	8. Convulsions	29	68	53	64	57	57	50
	9. *Brain Diseases, etc*	31	34	31	30	45	36	41
	ORDER 2.							
	1. Pericarditis	.....	2	1	1	2	.....	1
	2. Aneurism	1	.....	1	1	.....	1	1
	3. *Heart Diseases, etc*	28	38	63	41	65	66	62

---

[1] Includes 8 cases of Chicken Pox. [2] Includes Mumps. [3] Includes Bilious, Typhus and Continued

Causes of Deaths Registered in Rhode Island.

1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.
9	5	7	7	12	22	2	1	2	3	6	12	25	28	8
8	11	12	36	26	16	15	12	20	19	26	6	24	63	7
64	57	47	91	266	255	28	14	93	286	75	66	54	287	462
67	140	81	155	160	82	64	31	20	33	33	57	48	45	59
......	......	......	......	2	5	1	4	3	1	3	14	23	62	16
3	......	1	......	2	1	......	......	......	1	3	......	......	1	......
57	58	76	97	105	94	53	50	30	41	53	72	66	68	65
46	45	15	24	31	56	28	12	26	48	39	25	27	32	45
67	94	84	128	116	233	152	126	86	106	157	130	190	172	121
26	14	11	14	28	21	16	25	25	14	21	18	23	39	26
9	7	4	14	14	13	7	8	12	10	16	18	9	17	16
......	1	......	......	......	1	1	......	1	2	1	2	......	1	......
2	3	3	6	5	1	1	1	2	......	......	......	1	1	2
41	44	60	62	93	76	49	39	45	50	47	45	100	64	65
49	96	52	262	110	188	148	118	52	74	55	43	83	36	38
151	134	106	114	133	145	110	117	154	151	213	172	391	285	265
7	12	6	9	9	14	72	11	10	11	11	13	18	13	8
......	......	......	......	1	......	2	......	......	2	......	......	......	......	......
1	3	......	......	......	1	......	......	1	1	2	1	1	1	......
2	5	3	2	5	2	5	5	3	......	5	6	9	3	7
......	......	1	......	......	......	......	1	......	......	......	......	......	......	......
......	......	......	1	......	......	......	......	......	......	......	......	......	......	......
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
......	......	......	3	......	......	1	......	......	2	1	......	1	1	1
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
3	4	2	4	4	......	......	1	1	2	3	2	......	......	3
10	4	5	7	4	3	3	5	4	9	3	7	6	4	3
16	26	17	25	23	7	4	5	6	9	14	10	17	10	19
3	4	4	3	8	5	2	8	4	8	4	11	......	5	2
3	4	2	4	1	3	3	1	2	......	2	......	1	......	1
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
56	48	46	52	45	61	49	49	49	53	61	56	55	60	39
5	3	4	12	4	3	3	2	4	4	2	6	4	3	2
44	58	61	62	61	55	64	58	60	66	80	65	95	106	87
......	1	......	......	1	......	2	......	......	......	......	1	5	1	......
10	10	7	8	5	12	4	7	6	4	7	9	7	11	5
16	6	4	7	7	8	10	7	11	17	17	13	21	47	22
9	14	14	13	14	12	5	9	3	11	19	22	9	20	20
1	3	3	......	3	7	2	2	2	10	4	5	5	7	8
505	523	513	512	498	547	526	563	517	555	577	535	600	584	536
52	63	50	47	49	63	56	41	57	76	51	71	44	52	51
......	......	......	......	......	6	4	10	9	18	16	24	23	18	21
41	43	36	54	49	39	46	52	40	54	42	44	57	109	60
51	57	43	52	52	55	56	72	57	69	64	77	58	67	70
32	40	36	31	42	45	36	52	54	48	66	79	67	67	86
11	13	7	10	15	20	13	14	13	14	18	16	26	19	13
......	......	......	......	......	......	......	......	1	......	......	......	......	......	......
4	11	6	6	3	7	4	12	5	5	4	10	13	15	16
5	5	6	8	4	6	3	3	3	2	5	5	8	2	8
70	70	55	71	73	73	83	68	63	79	85	83	116	97	98
31	48	42	40	54	36	52	43	38	48	55	51	78	74	67
3	2	......	......	......	1	......	......	......	......	......	......	......	......	......
1	1	2	......	1	......	1	1	......	......	3	2	1	2	1
69	105	111	99	123	98	116	114	116	128	117	144	189	191	216

Fevers. [4] Includes Cholera Morbus. [5] Includes Yellow Fever.

TABLE X.—Continued.

Class.	CAUSES OF DEATH.	1875.	1876.	1877.	1878.	1879.	1880.	1881.
I.	ORDER 1.							
	1. Small Pox[1]	4	1	5	1	1	......	3
	2. Measles	2	4	11	81	......	9	37
	3. Scarlet Fever	185	80	62	86	311	468	138
	4. Diphtheria	33	159	492	435	259	152	216
	5. Cerebro Spinal Meningitis	13	7	8	11	10	20	18
	6. Quinsy[2]	......	......	4	3	......	1	2
	7. Croup	96	102	95	93	96	66	101
	8. Whooping Cough	31	48	32	54	43	20	68
	9. Typhoid Fever[3]	150	123	123	136	101	141	117
	10. Erysipelas	21	18	21	17	25	17	37
	11. Metria (Puerperal Fever)	18	18	17	17	9	15	22
	12. Carbuncle	1	1	3	......	1	......	2
	13. Influenza	6	......	1	......	4	......	3
	14. Diarrhœa	70	72	90	53	53	70	77
	15. Dysentery	36	50	52	40	44	28	42
	16. Cholera Infantum	318	250	259	168	161	247	240
	17. Cholera[4]	8	13	20	6	8	11	18
	18. Intermittent Fever	......	......	1	......	......	......	1
	19. Remittent Fever[5]	......	......	......	1	2	4	9
	ORDER 2.							
	1. Syphilis	8	8	10	4	10	10	4
	2. Gonorrhœa	1	2	2	......	......	......	2
	3. Hydrophobia	1	2	2	3	......	......	......
	4. Glanders	......	......	1	......	......	......	......
	5. Malignant Pustule	......	......	2	......	......	......	1
	6. Septicæmia	1	......	......	3	2	......	1
	ORDER 3.							
	1. Inanition	......	1	......	......	......	......	2
	2. Puerpera and Scurvy	1	5	5	1	1	6	3
	3. Alcoholism, Delirium Tremens	4	6	4	3	3	1	10
	Intemperance	13	15	8	12	12	14	14
	ORDER 4.							
	1. Thrush	5	4	8	4	1	.....	1
	2. Worms	2	1	......	2	1	.....	1
II.	ORDER 1.							
	1. Gout	......	......	......	......	......	......	......
	2. Dropsy	56	66	63	38	50	37	47
	3. Anæmia	4	2	1	2	8	8	4
	4. Cancer	95	106	135	119	125	125	145
	5. Noma (Canker)	2	......	.....	1	1	2	......
	6. Mortification	10	11	8	9	13	9	14
	7. Rheumatism	26	14	24	16	24	24	29
	ORDER 2.							
	1. Scrofula	21	18	11	13	13	12	15
	2. Tabes Mesenterica	4	5	10	6	3	3	8
	3. Phthisis (Consumption)	657	660	665	685	645	652	712
	4. Hydrocephalus (Tubercular Meningitis)	57	68	55	70	57	46	56
	5. *Tuberculosis*	8	18	25	27	36	12	39
III.	ORDER 1.							
	1. Cephalitis	66	80	81	81	79	88	107
	2. Apoplexy	67	95	109	102	137	119	146
	3. Paralysis	99	70	72	86	83	96	101
	4. Insanity	32	19	12	22	17	19	32
	5. Chorea	......	......	1	.....	......	3	......
	6. Epilepsy	20	12	19	8	13	14	13
	7. Tetanus	5	2	5	8	6	3	8
	8. Convulsions	100	89	83	112	104	133	102
	9. *Brain Diseases, etc*	52	70	81	62	85	76	82
	ORDER 2.							
	1. Pericarditis	......	......	......	......	......	......	......
	2. Aneurism	4	2	4	6	1	2	2
	3. *Heart Diseases, etc*	187	166	183	166	207	235	269

---

[1] Includes 8 cases of Chicken Pox. [2] Includes Mumps. [3] Includes Bilious, Typhus and Continued

Causes of Deaths Registered in Rhode Island.

1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	Total and Percentage for 40 Years, 1853 1892.	
2	3	......	......	......	......	......	......	1	1	4	219	.12
6	14	18	45	18	132	11	29	92	12	28	954	.56
45	34	97	91	88	266	207	51	16	33	67	5 355	3.13
101	95	119	99	228	287	191	184	211	102	89	4,553	2.66
28	26	21	16	10	24	22	9	17	16	18	428	.25
......	3	1	1	1	8	4	7	10	6	6	69	.04
77	71	80	94	90	113	79	80	83	67	89	2,934	1.71
71	9	43	42	49	21	44	77	70	77	25	1,430	.84
214	239	128	105	121	116	224	135	107	149	133	4,892	2.87
30	28	25	36	31	32	31	28	22	26	25	878	.52
28	16	12	19	10	25	18	17	19	12	30	542	.31
1	3	4	1	2	3	......	......	2	2	4	44	.02
1	......	2	2	7	......	7	4	168	177	336	776	.46
90	130	113	84	93	133	80	88	95	84	128	2,748	1.61
68	54	40	36	66	66	77	71	87	59	71	2,898	1.70
325	242	325	279	377	355	467	427	582	546	633	9,341	5.46
24	25	18	24	17	18	30	26	36	28	33	809	.48
8	21	29	34	43	83	69	38	41	29	34	437	.26
......	......	......	......	......	2	2	2	1	2	2	52	.03
16	18	14	7	12	13	11	13	15	8	14	269	.15
......	......	......	1	1	1	2	1	......	3	......	18	.01
......	......	......	......	......	......	1	2	4	1	......	20	.01
......	......	......	......	......	......	......	......	......	......	......	1	...
1	......	3	1	......	1	2	1	......	......	1	31	.02
......	3	13	10	10	18	24	8	14	12	13	135	.08
1	10	7	22	20	28	19	30	31	37	22	232	.13
4	3	1	3	3	2	5	7	5	3	1	100	.06
7	8	3	5	3	1	2	6	4	27	7	231	.13
20	21	27	17	9	15	14	31	21	2	29	564	.33
2	2	2	......	2	1	......	2	......	2	......	128	.08
......	......	......	......	......	......	1	......	1	......	......	42	.02
......	......	1	......	1	1	......	2	......	......	......	5	....
50	47	40	44	47	39	47	44	46	35	39	1,905	1.12
4	7	7	6	15	16	13	21	19	20	16	270	.15
132	169	156	193	159	159	193	189	165	177	181	3,954	2.31
......	1	5	......	......	......	......	3	4	1	......	33	.02
6	9	10	19	6	15	19	23	20	15	21	380	.22
21	27	34	34	34	34	35	30	45	35	48	744	.43
14	22	20	18	23	21	12	17	11	21	18	550	.32
4	5	15	7	19	6	13	11	11	12	26	237	.13
744	766	739	783	827	710	806	727	852	740	759	23,718	13.87
49	54	56	47	54	54	50	58	72	66	62	2,205	1.30
27	29	36	43	41	29	32	40	36	52	50	730	.43
95	91	78	91	104	112	133	109	172	178	167	2,860	1.66
154	157	182	185	230	206	211	210	242	219	238	4,166	2.43
111	118	116	104	107	122	156	113	99	116	124	2,791	1.63
22	29	36	35	49	64	43	22	30	21	27	832	.50
......	1	......	......	2	1	2	1	......	1	......	16	.01
14	18	11	23	14	17	16	19	23	27	25	468	.27
8	8	5	4	8	7	9	7	4	3	6	199	.11
110	126	139	111	121	159	154	136	156	137	162	3,796	2.21
87	86	83	86	92	91	81	80	46	45	79	2,369	1.38
......	17	......	10	21	29	23	29	27	33	19	221	.13
2	8	3	4	2	5	6	7	8	5	3	95	.06
260	308	290	345	310	377	413	431	378	447	487	7,753	4.54

Fevers. [4] Includes Cholera Morbus. [5] Includes Yellow Fever.

TABLE X.—Continued.

Class.	CAUSES OF DEATH.	1853.	1854.	1855.	1856.	1857.	1858.	1859.
III.	ORDER 3.							
	1. Epistaxis							
	2. Laryngitis	2	1	1	5	2	5	4
	3. Bronchitis	2	3	4	5	7	13	9
	4. Pleurisy	7	10	12	13	10	12	18
	5. Pneumonia	48	54	79	120	141	166	125
	6. Asthma	1	2	2	3	2	2	2
	7. *Lung Diseases, etc*	7	3	5	5	2		3
	ORDER 4.							
	1. Gastritis		3	3	8	9	1	4
	2. Enteritis	11	11	13	14	13	23	21
	3. Peritonitis	4	2	13	17	5	10	13
	4. Ascites		3					
	5. Ulceration of Intestines							
	6. Hernia	1	2	2			5	1
	7. Ileus	2	3	10	10	9	6	6
	8. Intussusception							1
	9. Stricture of Intestines			1		2		
	10. Fistula						1	
	11. *Stomach Diseases*	5	5	4	11	7	8	8
	12. *Pancreas Diseases*							
	13. Hepatitis							6
	14. Jaundice	3	2	2		3	4	3
	15. *Liver Diseases, etc*	4	6	6	7	18	31	20
	16. *Spleen Diseases, etc.*		2					
	17. *Bowel Diseases, etc*	4	4	3		2	4	5
	ORDER 5.							
	1. Nephritis (Bright's Disease, etc.)	1						3
	2. Ischuria			2		2		
	3. Diabetes	1		3	3	3	3	3
	4. Calculus (Gravel, etc.)		1				2	1
	5. Cystitis	1	1	1	2			4
	6. Prostate Disease		1			5	2	
	7. *Kidney Diseases, etc*	1	1	5	5	13	8	12
	8. *Bladder Diseases, etc*	2		2		3	2	
	9. Disease of Testicles							
	ORDER 6.							
	1. Ovarian Dropsy			2	3		4	
	2. *Uterine Diseases, etc*	5	4	1	2	2	3	
	ORDER 7.							
	1. Arthritis							
	2. *Joint Diseases, etc*	3	1	2	7	6	6	9
	ORDER 8.							
	1. Phlegmon	2		7	4	3	3	1
	2. Ulcer		2		1	2		
	3. *Skin Diseases, etc*		1	2	2	4	1	1
IV.	ORDER 1.							
	1. Stillborn	41	78	124	183	185	177	177
	2. Infantile Debility, Premature Birth, etc	2	13	34	17	17	33	25
	3. Cyanosis		1	1	1			
	4. Spina Bifida	2					2	
	5. Other Malformations	1	7	11	5	12	12	14
	6. Teething	8	20	28	15	35	29	31
	ORDER 2.							
	1. Paramenia							
	2. Childbirth	10	7	9	14	13	24	14
	ORDER 3.							
	1. Old Age	58	67	84	76	119	114	117
	ORDER 4.							
	1. Atrophy and Debility	18	28	47	58	53	55	43

Causes of Deaths Registered in Rhode Island.

1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
8	2	1	1	1	1	1	1	2	4	2	2	2	4	3
18	18	7	17	7	10	17	19	22	20	28	24	17	29	40
20	21	17	14	16	16	20	16	13	19	12	18	12	14	10
162	163	147	174	201	175	193	172	191	190	182	218	229	234	250
3	8	3	8	7	3	4	4	5	3	8	4	4	7	10
4	12	......	3	4	3	4	2	2	3	3	3	40	34	36
11	......	4	8	11	6	2	9	7	9	10	......	16	10	8
23	24	30	27	27	20	30	34	19	25	29	36	15	24	37
14	7	14	5	19	13	13	11	9	6	8	11	24	17	20
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
2	5	4	7	2	5	1	6	5	4	6	7	2	4	1
16	9	7	5	6	7	9	11	6	8	5	13	3	5	1
1	......	......	......	1	1	1	2	1	1	1	......	1	2	......
1	......	......	1	......	......	......	......	......	......	......	......	......	1	......
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
9	17	8	12	4	2	4	8	7	2	8	14	13	15	33
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
9	......	6	......	4	4	7	5	4	6	6	......	2	......	......
7	4	5	2	3	3	6	3	4	3	2	......	2	2	4
31	31	32	34	37	20	37	30	23	28	37	35	31	43	36
......	......	......	1	......	1	......	1	......	2	......	......	......	2	1
12	4	2	2	1	4	1	......	2	3	4	1	27	29	26
1	......	......	......	......	......	8	17	16	18	15	24	37	39	42
1	......	......	......	......	1	......	......	......	......	......	......	......	......	......
8	8	2	4	6	6	6	1	11	6	8	5	7	8	5
1	......	1	4	2	2	2	3	3	3	1	4	5	2	4
2	......	4	4	......	......	......	......	......	......	......	......	......	......	......
1	1	......	......	......	2	......	......	3	1	2	2	2	4	......
15	15	17	22	16	13	8	15	8	14	16	19	18	27	24
......	3	1	1	4	2	5	7	5	4	6	3	8	5	10
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
......	2	......	......	......	......	......	......	......	......	......	......	......	......	......
1	7	1	3	1	4	1	1	2	......	1	......	5	3	3
......	......	......	......	......	......	......	......	......	......	......	......	......	......	......
5	15	8	9	7	5	5	6	12	11	15	5	11	18	15
7	11	4	7	9	7	8	15	10	4	9	11	10	10	28
3	......	3	......	1	......	2	3	2	4	2	2	1	5	3
1	6	2	2	2	1	3	4	2	......	......	3	1	2	3
167	146	123	111	138	177	172	163	212	220	234	223	202	228	277
42	45	35	47	46	62	54	60	47	34	57	53	100	169	154
......	......	2	......	......	......	......	......	......	......	......	......	......	......	......
......	3	......	......	......	......	......	......	......	......	......	......	......	......	......
15	10	11	13	8	10	12	17	16	15	14	15	17	15	17
31	40	39	34	28	31	23	30	23	24	34	20	31	50	42
......	......	1	......	2	......	......	......	......	......	......	......	......	......	......
13	19	22	21	21	18	24	26	22	27	28	34	36	29	44
116	132	143	161	193	152	178	188	206	217	204	232	223	254	223
52	62	47	40	42	47	42	41	41	52	56	58	69	84	79

TABLE X.—Continued.

Class.	CAUSES OF DEATH.	1875.	1876.	1877.	1878.	1879.	1880.	1881.
III.	ORDER 3.							
	1. Epistaxis	......	......	......	......	......	......	......
	2. Laryngitis	4	3	2	2	2	8	6
	3. Bronchitis	58	57	73	80	67	94	86
	4. Pleurisy	10	9	5	8	13	17	9
	5. Pneumonia	400	339	226	317	311	344	327
	6. Asthma	10	7	8	8	13	11	16
	7. *Lung Diseases, etc*	13	14	8	15	12	14	20
	ORDER 4.							
	1. Gastritis	28	13	22	14	17	18	27
	2. Enteritis	29	36	39	40	34	33	44
	3. Peritonitis	28	24	17	22	24	24	27
	4. Ascites	......	......	......	......	......	......	......
	5. Ulceration of Intestines	......	......	......	......	......	......	......
	6. Hernia	1	7	5	7	12	8	10
	7. Ileus	......	8	8	12	9	9	10
	8. Intussusception	......	......	......	3	2	......	5
	9. Stricture of Intestines	1	......	......	......	......	......	......
	10. Fistula	......	......	......	......	......	......	......
	11. *Stomach Diseases*	13	10	7	13	13	10	12
	12. *Pancreas Diseases*	......	......	......	......	......	......	......
	13. Hepatitis	......	5	6	5	5	6	8
	14. Jaundice	4	1	7	4	3	3	3
	15. *Liver Diseases, etc*	43	39	39	40	44	49	35
	16. *Spleen Diseases, etc*	1	......	2	1	......	......	......
	17. *Bowel Diseases, etc*	11	5	1	4	2	9	6
	ORDER 5.							
	1. Nephritis (Bright's Disease, etc.)	40	38	46	54	61	56	54
	2. Ischuria	......	......	......	......	......	......	......
	3. Diabetes	11	5	9	4	15	15	16
	4. Calculus (Gravel, etc.)	2	1	9	1	1	......	1
	5. Cystitis	......	......	......	......	......	......	......
	6. Prostate Disease	3	4	2	4	4	4	1
	7. *Kidney Diseases, etc*	25	12	21	27	20	35	25
	8. *Bladder Diseases, etc*	4	9	11	2	12	9	13
	9. Disease of Testicles	......	......	......	......	......	......	......
	ORDER 6.							
	1. Ovarian Dropsy	......	......	......	......	......	......	......
	2. *Uterine Diseases, etc*	4	2	4	1	......	7	3
	ORDER 7.							
	1. Arthritis	......	......	......	......	......	......	......
	2. *Joint Diseases, etc*	16	27	15	10	20	15	11
	ORDER 8.							
	1. Phlegmon	9	18	7	13	14	5	17
	2. Ulcer	3	3	2	2	......	......	3
	3. *Skin Diseases, etc*	4	2	3	5	3	2	3
IV.	ORDER 1.							
	1. Stillborn	246	224	242	248	216	192	264
	2. Infantile Debility, Premature Birth, etc	135	75	67	72	69	93	92
	3. Cyanosis	......	......	......	......	......	3	......
	4. Spina Bifida	......	......	......	......	......	......	......
	5. Other Malformations	15	11	26	32	19	13	26
	6. Teething	20	22	27	16	22	25	28
	ORDER 2.							
	1. Paramenia	......	......	......	......	1	......	......
	2. Childbirth	35	30	29	26	35	36	38
	ORDER 3.							
	1. Old Age	216	241	213	222	220	273	247
	ORDER 4.							
	1. Atrophy and Debility	90	78	89	64	79	107	82

Causes of Deaths Registered in Rhode Island.

1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	Total and Percentage for 40 Years, 1853-1892.	
......	......	......	......	......	1	2	......	1	1	......	5	...
7	5	11	9	9	8	7	6	5	3	12	164	.10
101	111	118	168	174	176	228	260	275	247	308	3,026	1.77
8	13	5	7	12	15	18	23	18	26	34	570	.33
314	400	363	465	481	488	508	483	569	568	655	11,222	6.57
9	14	10	21	15	20	18	16	23	28	12	354	.21
12	34	10	......	5	13	11	17	18	6	10	410	.24
30	35	27	29	30	34	37	42	38	25	53	658	.38
75	47	76	64	85	43	88	78	63	71	73	1,524	.88
30	40	40	35	59	66	60	63	63	68	62	1,007	.59
......	1	2	......	2	......	1	7	2	3	3	24	.01
......	4	1	......	1	5	2	1	......	7	4	26	.01
11	7	11	10	15	13	11	10	16	16	22	269	.17
8	11	8	17	13	15	22	30	20	18	21	395	.23
5	3	5	4	1	......	3	2	2	6	2	56	.03
......	1	......	2	1	2	......	1	1	......	3	18	.01
......	......	......	......	1	1	1	1	1	......	......	6	....
14	16	16	22	29	34	24	33	35	32	14	551	.32
......	......	......	......	......	......	......	......	......	......	1	1	....
8	7	10	6	9	9	3	7	9	7	15	184	.11
8	6	5	9	2	12	12	11	15	19	13	204	.12
50	38	40	47	69	65	53	63	56	55	61	1,454	.84
......	......	2	......	1	1	1	......	......	......	......	19	.01
6	20	7	8	10	10	10	7	14	15	17	302	.18
44	93	90	143	140	130	102	176	213	229	220	2,240	1.31
......	2	......	......	......	......	......	......	1	2	2	13	.01
13	15	25	21	24	22	13	32	27	26	37	437	.26
......	1	......	1	......	1	1	5	2	2	......	69	.04
......	8	7	12	23	17	10	18	36	15	18	183	.11
3	7	4	4	8	7	4	1	2	8	5	101	.05
44	36	39	25	24	39	21	34	16	16	38	789	.47
14	11	13	9	3	4	3	6	3	2	4	205	.12
......	......	......	......	......	......	......	......	......	......	1	1	....
.....	6	12	8	8	5	5	4	4	8	6	77	.04
6	20	2	6	4	9	5	6	4	7	8	145	.08
......	......	......	......	......	1	......	1	2	1	2	7	....
25	26	32	34	26	22	15	17	23	19	15	549	.32
14	18	18	21	13	15	19	7	13	6	5	391	.23
2	1	4	......	6	1	.....	.....	2	4	1	70	.04
1	.....	5	2	3	4	7	3	7	3	4	104	.06
253	253	272	271	293	276	295	329	296	272	343	8,543	4.99
101	137	128	132	157	211	230	195	225	251	245	3,761	2.20
......	17	5	6	11	10	16	11	14	23	19	140	.08
......	......	......	......	......	......	4	4	6	8	1	30	.02
21	19	22	15	15	18	16	15	19	20	15	604	.35
33	30	21	29	26	24	35	44	27	52	18	1,145	.67
......	2	4	2	......	1	......	......	......	1	2	16	.01
22	42	35	26	31	28	33	27	26	22	45	1,141	.61
283	275	293	267	276	278	290	227	198	185	256	7,927	4.64
106	130	126	122	136	146	159	231	240	217	241	3,557	2.08

TABLE X.—Continued.

Class.	CAUSES OF DEATH.	1853.	1854.	1855.	1856.	1857.	1858.	1859.
V.	ORDER 1.							
	(ACCIDENTS OR NEGLIGENCE.)							
	1. Fractures and Contusions	1	1	......	4	......	......	......
	2. Burns and Scalds	9	9	14	12	7	6	13
	3. Drowning	13	15	18	13	20	24	24
	4. Falls	......	......	......	......	......	......	......
	5. Poison	1	3	6	4	3	5	4
	6. Suffocation and Strangulation	2	2	......	7	3	......	1
	7. Otherwise	31	23	19	16	40	38	37
	ORDER 2.							
	1. Battle	......	......	......	......	......	......	......
	ORDER 3.							
	1. Homicide	3	......	9	1	1	1	1
	ORDER 4.							
	1. Suicide	3	3	8	4	8	13	9
	Causes ill-defined	15	20	19	14	30	14	22
	Causes not stated	100	131	169	292	358	296	241

Causes of Deaths Registered in Rhode Island.

1860.	1861.	1862.	1863.	1864.	1865.	1866.	1867.	1868.	1869.	1870.	1871.	1872.	1873.	1874.
......	......	......	......	......	......	12	8	8	6	9	12	15	16	16
24	21	14	10	12	16	18	16	16	15	12	12	12	14	23
32	29	29	21	26	20	27	23	20	24	30	24	29	36	39
......	......	......	......	......	......	17	14	18	21	19	25	18	15	12
7	9	2	1	3	2	6	2	......	4	4	2	1	5	5
1	3	3	1	1	1	......	......	......	......	......	......	......	4	6
55	31	43	71	64	51	39	39	35	35	33	31	51	55	27
......	......	......	......	......	......	1	......	......	......	......	......	......	......	......
4	3	1	5	2	......	1	5	......	2	5	......	2	3	4
12	12	8	13	6	12	11	15	18	15	27	19	18	8	18
37	18	21	20	34	40	32	30	48	51	59	43	87	70	57
188	202	188	217	209	207	171	195	288	300	137	249	376	217	152

TABLE X.—Continued.

Class.	CAUSES OF DEATH.	1875.	1876.	1877.	1878.	1879.	1880.	1881.
V.	ORDER 1.							
	(ACCIDENTS OR NEGLIGENCE.)							
	1. Fractures or Contusions	12	10	13	7	10	18	20
	2. Burns and Scalds	17	12	18	11	13	21	16
	3. Drowning	35	37	30	44	22	33	29
	4. Falls	20	12	14	13	16	14	19
	5. Poison	6	4	9	6	7	5	9
	6. Suffocation and Strangulation	5	9	5	......	.....	......	19
	7. Otherwise	47	47	48	54	45	55	43
	ORDER 2.							
	1. Battle	1	.....	.....	.....	.....	.....	.....
	ORDER 3.							
	1. Homicide	3	4	3	3	1	1	4
	ORDER 4.							
	1. Suicide	26	18	22	21	13	10	23
	Causes ill-defined	56	32	56	49	48	46	55
	Causes not stated	207	213	192	210	254	233	347

Causes of Deaths Registered in Rhode Island.

1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	Total and Percentage for 40 Years, 1853 1892.	
16	16	16	15	20	47	33	48	57	59	89	614	.36
17	18	20	19	23	17	27	20	20	18	21	633	.37
40	27	41	42	58	39	46	52	71	52	48	1,282	.75
31	21	31	25	19	17	18	31	32	21	33	546	.31
7	10	8	9	6	7	12	7	11	16	23	241	.14
8	12	11	10	10	14	8	9	12	17	26	210	.11
59	53	70	58	58	65	46	49	47	50	69	1,827	1.06
......	.....	......	......	......	......	......	......	......	......	......	14	.01
6	3	2	3	2	2	5	3	2	1	4	105	.06
31	25	22	20	17	16	21	24	19	40	19	647	.38
45	22	19	57	39	35	46	49	45	35	34	1,550	.90
271	186	42	59	51	19	28	39	43	34	28	7,239	4.24

TABLE XI.—OCCUPATIONS AND AGES OF DECEDENTS.

Showing the number and occupations of decedents for the year 1892, and for a period of thirty-six years and seven months, 1852 to 1888 inclusive. Ages under Twenty excluded.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1892.			36 Years and 7 Months, June 1, 1852, to Dec. 31, 1888.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
I.						
TILLERS OF THE SOIL.						
Farmers	167	12,068	72.27	5,169	342,238	66.21
Florists	2	100	50.00	19	889	47.16
Gardeners	17	1,052	61.88	179	10,710	59.83
Total	186	13,220	71.07	5,367	353,837	65.93
II.						
PROFESSIONAL AND PERSONAL.						
Actors	2	70	35.00	8	268	36.00
Architects	....	....	....	5	264	52.80
Artists	....	....	....	27	1,324	49.04
Assayers and Analytical Chemists	....	....	....	3	191	13.67
Athletes	1	25	25.00	....	....	....
Authors	1	61	61.00	5	329	65.80
Civil Engineers	3	82	27.33	27	1,389	51.04
Clergymen	9	615	68.33	175	11,049	63.14
Dancing-masters	1	81	81.00	....	....	....
Dentists	....	....	....	18	925	51.40
Designers	1	25	25.00	9	491	54.56
Draughtsmen	....	....	....	6	227	37.83
Electricians	2	49	24.50	....	....	....
Inspectors	....	....	....	1	56	56.00
Inventors	2	131	65.50	7	444	63.43
Journalists (Editors and Reporters)	3	143	47.67	21	994	47.33
Judges and Justices	....	....	....	13	862	66.31
Lawyers	5	304	60.80	126	6,785	53.85
Lecturers	....	....	....	1	46	46.00
Musicians	4	217	54.25	43	1,967	45.73
Nurses	3	123	41.00	9	499	55.44

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND. 1892. Total Mortality.	1892. Aggregate Ages.	1892. Average Age.	36 Years and 7 Months, June 1, 1852, to Dec. 31, 1888. Total Mortality.	36 Years and 7 Months, June 1, 1852, to Dec. 31, 1888. Aggregate Ages.	36 Years and 7 Months, June 1, 1852, to Dec. 31, 1888. Average Age.
Photographers and Lithographers	1	31	31.00	17	736	43.29
Physicians	15	851	56.73	219	12,981	59.27
Public Officers	1	61	61.00	58	3,449	59.47
Sheriffs, Constables and Policemen	5	271	54.20	76	4,306	56.66
Sculptors	1	27	27.00	1	53	53.00
Stenographers	...	...	...	1	29	29.00
Students	1	22	22.00	53	1,184	22.34
Teachers and Professors	5	246	49.20	109	5,247	48.14
Telephone and Telegraph Operators	2	52	26.00	10	313	31.30
Veterinary Surgeons	1	67	67.00	1	33	33.00
Weighers, Gaugers, etc	...	...	...	5	345	69.00
Total	69	3,554	51.51	1,054	56,786	53.87
III.						
OPTIONAL ACTIVITY.						
Agents and Canvassers	7	289	41.30	130	6,985	53.73
Auctioneers	...	...	...	6	274	45.67
Bankers and Brokers	5	301	60.20	89	5,319	59.76
Bank Officers	1	50	50.00	54	3,483	64.44
Bar Tenders	5	196	39.20	12	418	34.84
Booksellers	...	...	...	1	78	78.00
Bottlers	...	...	...	1	29	29.00
Butchers and Marketmen	11	580	52.72	189	9,645	51.03
Carriage Dealers	...	...	...	1	55	55.00
Coal and Wood	2	75	37.50	1	25	25.00
Dry Goods	2	68	34.00	...	...	...
Fish and Oyster	2	94	47.00	1	58	58.00
Furniture	2	132	66.00	...	...	...
Grain	1	63	63.00	1	44	44.00
Hardware	...	...	...	1	52	52.00
Ice	1	32	32.00	...	...	...
Junk	2	129	64.50	7	386	55.14
Leather	...	...	...	1	35	35.00
Liquor	13	542	41.69	65	2,887	44.41
Lumber	1	78	78.00	4	165	41.25

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND. 1892. Total Mortality.	Aggregate Ages.	Average Age.	30 Years and 7 Months, June 1, 1862, to Dec. 31, 1892. Total Mortality.	Aggregate Ages.	Average Age.
Paper Dealers	1	64	64.00	...	...	...
Printers	1	43	43.00	2	114	57.00
Rubber	1	45	45.00	...	...	...
Shoe	3	124	41.33	2	125	62.50
Stove	2	152	76.00	...	...	...
Wood Ware	...	...	...	1	56	56.00
Clothiers	...	...	...	7	448	64.00
Caterers	...	...	...	11	742	67.45
Contractors and Builders	2	119	59.50	56	3,108	55.50
Druggists and Apothecaries	3	193	64.33	33	1,535	46.51
Fruiterers	...	...	...	1	59	59.00
Grocers	10	615	61.50	324	17,885	55.20
Hotel and Innkeepers	7	422	60.29	111	6,098	54.94
Saloon and Restaurant	10	520	52.00	124	5,501	44.36
Stable	5	241	48.20	30	1,688	56.27
Ice-cream Makers	...	...	...	1	36	36.00
Mail Carriers	1	45	45.00	7	300	42.86
Manufacturers	21	1,413	67.29	423	24,437	57.77
Merchants	27	1,668	61.78	709	42,103	59.38
Opticians	...	...	...	2	121	60.50
Organ and Piano-makers	...	...	...	5	307	61.40
Pork and Meat-cutters and Pork-packers	...	...	...	6	271	45.17
Railroad Officials	3	166	55.33	61	2,700	44.26
Ship-chandlers	...	...	...	3	185	61.67
Tobacconists	...	...	...	7	414	59.14
Traders	...	...	...	304	15,720	51.71
Undertakers	2	124	62.00	24	1,290	53.75
Various and Unspecified Tradesmen	10	496	49.60	116	6,450	55.60
Total	173	9,739	56.29	3,237	178,232	55.06

IV.

OPERATIVES.—Land.

Boat-builders	1	54	54.00	35	1,911	54.60
[illegible]	1	80	80.00	...	...	...
Box-makers	...	...	...	4	181	45.25

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1892.			36 Years and 7 Months, June 1, 1852, to Dec. 31, 1888.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Sash and Blind Makers				8	374	44.25
Brick and Stone Layers	3	164	54.67	5	260	52.00
Calkers				8	594	74.25
Carpenters and Joiners	80	4,601	57.51	1,392	75,094	53.95
Masons	35	2,208	63.09	577	32,359	56.07
Millwrights				25	1,581	63.24
Pavers				1	70	70.00
Riggers	1	87	87.00	21	1,167	55.57
Roofers				1	27	27.00
Ship-carpenters	5	370	74.00	52	3,515	67.59
Slaters				6	245	40.83
Stonecutters and Marble-workers	15	718	47.87	157	7,892	50.27
Tanners and Curriers	1	80	80.00	36	2,228	61.89
Wheelwrights	4	255	63.75	78	4,689	60.12
Total	146	8,581	58.77	2,393	131,587	59.17
V.						
INDOOR.—*Active.*						
Axe and Scythe Grinders	1	34	34.00	3	188	62.67
Bakers	6	356	59.33	95	5,158	54.21
Basket-makers	1	84	84.00	2	121	60.50
Belt				7	411	58.71
Bobbin				1	62	62.00
Boiler	2	99	49.50	48	1,806	37.63
Bolt				1	60	60.00
Broom and Brush	1	58	58.00	9	438	48.67
Cabinet	5	283	56.60	105	6,135	58.43
Card				3	151	50.33
Carriage and Trimmers				53	2,759	52.06
Chair				1	70	70.00
Comb				3	118	39.33
Seine				2	117	58.50
Mattress	1	38	38.00			
Pattern	4	202	50.00	42	2,274	54.14
Pianoforte				2	90	45.00
Picker				5	303	60.06

Table XI.—OCCUPATIONS AND AGES —Continued.

OCCUPATIONS.	State of Rhode Island.					
	1892.			36 Years and 7 Months, June 1, 1852, to Dec. 31, 1888.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Plane-makers	.....	.....	....	1	79	79.00
Pump and Block	....	......	..	14	788	55.71
Reed	1	68	68 00	1	60	60 00
Spindle	....	......	....	4	237	59.25
Stopper	....	......	..	1	22	22.00
Tool	3	137	45 67	9	393	45.66
Trunk	...	......	.....	3	89	29.67
Umbrella	..	......	...	2	103	51.50
Beamers	1	37	37.00	......	....	....
Bell-hangers	1	23	23 00	1	24	24.00
Blacksmiths and Farriers.	20	1,259	62.95	462	24,635	53.32
Bleachers and Fullers	1	60	60.00	48	2,404	50 08
Bonnet-dressers	....	......	.....	2	73	36.50
Brewers	1	44	44.00	11	525	47.72
Britannia-workers	....	......	..	1	65	65.00
Calico-printers	2	157	78.50	54	2,889	53.50
Car Builders	1	57	57.00	....	.....	....
Stair	....	......	.....	3	153	51.00
Carders	5	297	59.40	......	....	.....
Carvers	....	......	....	3	147	49.00
Colorers	1	27	27.00	......	....	..
Confectioners	1	21	21 00	32	1,371	42.84
Cooks and Caterers	3	123	41.00	42	2.003	47.68
Coopers	.	......	.....	107	7,063	66.01
Coppersmiths	....	......	..	5	347	69 40
Cutters	...	......	....	3	153	51.00
Nail	..	......		11	422	38.35
Decorators	1	43	43 00	......	....	..
Distillers	..	......	.....	1	77	77.00
Dyers	9	533	59.22	82	4,162	50.76
Founders	....	......	.....	10	381	38.10
Brass and Iron	....	......	.....	8	472	59.00
Foundrymen	1	50	50.00	3	185	61.67
Furnacemen and Puddlers	1	65	65 00	3	130	43.33
Gasfitters	6	266	44.33	37	1,588	42 93
Gilders	...	......	..	7	279	39.43
Glassblowers	1	40	40.00	......	....	.....
Pressers	1	73	73.00	......	....	.....
Gun and Locksmiths	1	75	75.00	21	1,129	53.76

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1892.			36 Years and 7 Months. June 1, 1852, to Dec. 31, 1888.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Hatters	1	48	48.00	20	1,052	52.60
Heaters				1	44	44.00
Iron Rollers and Workers.	4	185	46.25	2	107	53.50
Japanners				1	47	47.00
Lathers				2	58	29.00
Machinists	65	3,480	53.54	990	47,412	47.89
Mechanics	4	250	62.50	402	21,229	52.81
Melters	1	71	71.00			
Miners	3	201	67.00	9	465	51.67
Moulders	15	809	53.93	183	8,141	44.48
Painters and Glaziers	29	1,506	51.93	542	24,718	45.79
Paper-hangers				11	576	52.36
Plasterers and Stucco-workers	6	269	44.83	28	1,395	49.96
Platers				1	76	76.00
Electro	1	60	60.00			
Gold	1	46	46.00			
Plumbers	10	423	42.30	48	1,908	39.75
Pressmen	3	135	45.00			
Refiners				3	84	28.00
Gold				3	153	51.00
Oil				1	76	76.00
Sugar				7	311	44.43
Scissors-grinders				1	70	70.00
Soapboilers				2	118	59.00
Steam-pipers				1	56	56.00
Stone Manufacturers				7	416	59.43
Superintendents and Overseers	25	1,400	56.00	153	8,147	53.25
Tallow-chandlers				3	243	81.00
Tinsmiths	3	101	33.67	79	3,469	43.91
Turners	1	52	52.00			
Upholsterers	4	199	49.75	31	1,115	35.96
Wire-workers	1	82	82.00	5	210	42.00
Wood-carvers				2	54	27.00
Finishers				2	84	42.00
Turners	2	109	54.50	19	840	44.26
Total	262	14,035	53.56	3,933	195,383	49.67

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1892.			36 Years and 7 Months, June 1, 1852, to Dec. 31, 1888.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
VI.						
INDOOR.—*Activity Restricted.*						
Barbers	5	167	33 40	160	5,962	37.26
Bookbinders	2	77	38.50	17	774	45.53
Book-keepers and Accountants	15	747	49.80	284	12,521	44.08
Boxmakers	....	.....	....	11	431	39.17
Braid	....	.....	.....	1	66	66.00
Chain	....	.....	.....	2	118	59.00
Cigar	1	72	72.00	85	3,683	43.33
Clock and Watch	1	74	74.00	21	1,075	51.18
Harness and Saddles	1	65	65.00	85	4,002	47.08
Paper	..	.....	.....	3	218	72 67
Rope	1	87	87.00	24	1,585	66.04
Sail	1	58	58.00	30	1,768	58.93
Shoe	17	1,110	64 71	454	26,250	57 82
Chasers	4	158	39 50	1	45	45.00
Clerks and Salesmen	51	1,930	37.84	681	23,576	34 62
Die-sinkers	....	.....	.....	17	767	45 18
Enamelers	1	62	62.00	2	128	64.00
Engravers	8	442	55.25	96	4,496	46.83
File-cutters	6	235	39.16	49	2,098	42.82
Finishers	1	37	37.00	3	140	46 67
Brass	1	81	81.00	3	117	39 00
Jewelers	32	1,417	44.28	668	26,773	40.08
Shell	1	83	83.00	......	......	.....
Lapidaries	1	68	68.00	7	225	32.14
Laundrymen	....	.....	.....	7	277	39.57
Leather-dressers	....	.....	.....	2	141	70.50
Millers	1	59	59.00	36	2,102	58.39
Operatives	86	3,949	45.92	1,566	67,149	43.15
Polishers	1	25	25.00	6	312	52.00
Silver	1	23	23.00	......	....	.....
Steel	....	.....	.....	1	42	42.00
Printers	7	313	44 72	145	6,877	47.43
Roll-coverers	1	54	54.00	24	1,449	60.38
Rubber-workers	17	680	42.35	62	2,425	39.11
Silversmiths	3	116	38.67	75	3,337	44.49

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1892.			36 Years and 7 Months, June 1 1852, to Dec. 31, 1888.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Tailors	13	777	59.77	301	16,182	53.76
Wool-sorters	6	301	50.16	16	721	45.06
Total	286	13,257	46.39	4,935	217,832	44.14
VII.						
OCCUPATIONS AT LARGE.						
Army Officers	1	60	60 00	1	58	58 00
Baggage Masters	....	......	...	3	88	29.33
Base-ball players	1	30	30.00	......	....	....
Boatmen	3	163	54.33	17	1,029	60.53
Brakemen	8	238	29.75	50	1,404	28.08
Car Drivers and Conductors	5	202	40.40	8	275	34.38
Coachmen	8	410	51.25	122	5,224	42 82
Drivers	5	239	47.80	1	73	73.00
Drovers	....	......	.....	2	83	41 50
Engineers and Firemen	18	809	44.99	218	10,084	46.26
Expressmen	3	140	46.67	62	2,971	47 92
Fire-company Members	....	......	.....	1	31	31.00
Fishermen and Oystermen	7	367	52 42	174	8,496	48.79
Gripmen	1	27	27.00	.....	....	....
House-movers	1	61	61.00	4	284	71.00
Lumbermen	....	......	.....	1	87	87.00
Mariners	3	199	66.33	498	24,353	48.90
Messengers	....	......	.....	1	29	29.00
Naval Officers	....	......	...	14	674	48 14
Peddlers	9	402	44.67	111	5,484	49.41
Pilots	....	......	.....	13	739	56 84
Sailors	6	253	42.16	183	8,905	48.66
Sea Captains or Ship-Masters	7	545	77.86	112	7,332	65.46
Soldiers	1	45	45.00	135	4,041	29.92
Stage-drivers	....	......	.....	6	262	43.67
Switchmen, Gatemen, etc.	1	80	80.00	1	60	60.00
Teamsters	43	2,074	48.46	345	16,127	46.74
Total	131	6,344	48.43	2,083	98,193	47.14

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1892.			36 Years and 7 Months, June 1, 1852, to Dec. 31, 1888.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
VIII.						
NO SPECIAL EMPLOYMENT.						
Billposters	...	...	...	1	59	59.00
Butlers	1	69	69.00	...	...	...
Cabdrivers and Hackmen	...	...	...	27	1,153	42.70
Gentlemen	3	212	70.67	39	2.580	66.15
Hostlers	8	329	41.13	70	2,889	41.26
Icemen	...	...	...	4	265	66.25
Janitors	3	149	49.67	39	1,987	50.96
Laborers	470	23,520	50.04	6,593	323,340	49.04
Lamplighters	2	144	72.00	7	355	50.71
Lighthouse-keepers	...	...	...	2	111	55.50
Linemen	2	83	41.50	...	...	...
Milkmen	...	...	...	5	179	35.80
Porters	2	99	49.50	29	1,402	48.34
Servants	1	48	48.00	17	749	44.06
Sextons	...	...	...	3	170	56.67
Stevedores	1	56	56.00	13	618	47.54
Stewards	4	169	42.25	7	247	35.29
Stove-mounters	...	...	...	2	108	54.00
Ushers	1	84	84.00	...	...	...
Waiters	10	377	37.70	84	3,521	41.95
Watchmen	4	259	64.75	102	5.477	53.60
Well-diggers	...	...	...	4	295	73.75
Whitewashers	...	...	...	3	173	57.67
Wood-sawyers	...	...	...	2	105	52.50
Total	512	25,598	50.00	7,053	345,783	49.03
IX.						
EMPLOYMENTS OF WOMEN.						
Actresses	1	24	24.00	1	24	24.00
Agents	...	...	...	1	59	59.00
Artists	...	...	...	2	137	68.50
Basket-makers	...	...	...	2	149	74.50
Box	...	...	...	4	120	30.00
Braid	1	60	60.00	...	...	...
Cap	...	...	...	1	28	28.00

TABLE XI.—OCCUPATIONS AND AGES.—Continued.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1892.			36 Years and 7 Months, June 1, 1852, to Dec. 31, 1888.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
Chain Makers	1	34	34.00	1	33	33.00
Cigar	....	......	....	5	140	28 00
Dress and Seamstreses	17	822	48.35	220	8,964	40.75
Harness	....	......	.....	1	52	52 00
Boardinghouse-keepers	....	......	....	22	1,389	63.14
Book	2	62	31.00	2	69	34.50
House	186	9,718	52.25	1,903	79,178	56 43
Shop	....	......	....	3	137	45.67
Boatwomen	1	60	60.00	.....	....	.....
Bookbinders	....	......	.....	1	43	43.00
Clerks and Saleswomen	5	115	23.00	7	249	35.56
Cooks	5	251	50.20	14	785	56.07
Farming	....	......	.....	1	89	89.00
Hairdressers	....	......	.....	1	25	25.00
Housewives	37	2,045	55.27	13	713	54.85
Jewelers	1	24	24 00	7	183	26 14
Laboring	2	102	51.00	2	49	24.50
Laundresses	1	34	34.00	22	1,086	49 36
Milliners	2	66	33.00	44	1,471	33.43
Musicians	....	......	.....	1	31	31.00
Nurses	2	150	75.00	71	4.428	62.38
Operatives	60	1,794	29.90	559	16.827	30.10
Physicians	1	42	42.00	8	455	56.88
Public Officers	1	45	45.00	1	65	65.00
Rubber-workers	1	23	23.00	5	139	27 80
Servants and Domestics	22	1,117	50.77	324	15,202	46.91
Sisters of Mercy	1	34	34 00	22	820	37 27
Stewardesses	....	......	.....	1	38	38.00
Superintendents	....	......	..	2	126	63.00
Tailoresses	3	198	66.00	126	5,798	46.02
Teachers	18	746	41.44	153	6,562	42.89
Telegraph and Telephone Operators	....	......	..	1	54	54 00
Upholsterers	....	......	....	1	34	34.00
Waitresses	1	22	22.00	3	106	35.33
Total	372	17,588	47.28	3,058	145,857	47.69

TABLE XI.—OCCUPATIONS.—RECAPITULATION.

OCCUPATIONS.	STATE OF RHODE ISLAND.					
	1892.			36 Years and 7 Months, June 1, 1852, to Dec. 31, 1888.		
	Total Mortality.	Aggregate Ages.	Average Age.	Total Mortality.	Aggregate Ages.	Average Age.
I. TILLERS OF THE SOIL...	186	13,220	71.07	5,367	353,837	65.93
II. PROFESSIONAL AND PERSONAL..............	69	3,554	51.51	1,054	56,786	53.87
III. OPTIONAL ACTIVITY. ...	172	9,639	56 04	3,137	172,158	54.88
IV. OUTDOOR.—*Local*.. ...	146	8,581	58.77	2,393	131,587	59.17
V. INDOOR.—*Active*.	262	14,035	53.56	3,933	195,383	49.67
VI. INDOOR. — *Activity Restricted*.............	286	13,257	46.39	4,935	217,832	44.14
VII. OCCUPATIONS AT LARGE..	131	6,344	48.45	2,083	98,193	47.14
VIII. NO SPECIAL EMPLOYMENT	512	25,598	50.00	7,053	345,783	49.03
IX. EMPLOYMENTS OF WOMEN	372	17,588	47.28	3,058	145,857	47.69
ALL CLASSES	2,136	111,816	52.35	33,013	1,717,416	51.97

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1892.

Ages under twenty excluded.

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Debility.	Diabetes.	Diarrhœa and Dysentery.	Dropsy.	Enteritis.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia.	Rheumatism.	Septicæmia.	Spinal Diseases.	Stomach Diseases.	Suicide.	Tuberculosis.
I. TILLERS OF THE SOIL.																																			
Farmers	159	3	2	17	..	4	4	3	5	8	7	5	1	3	2	..	..	..	1	1	25	14	2	7	1	21	..	3	17	..	..	..	..	1	2
Florists	2	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Gardeners	17	1	1	..	..	1	..	..	2	..	2	1	..	1	..	..	..	..	..	..	2	1	..	1	..	..	..	..	2	..	..	..	2	..	..
Total	178	4	3	17	..	5	4	3	7	9	9	6	1	4	2	..	..	..	1	1	27	15	2	9	1	21	..	3	19	..	..	..	2	1	2
II. PROFESSIONAL AND PERSONAL.																																			
Actors	2	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Athletes	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Authors	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Civil Engineers	3	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Clergymen	9	1	..	..	..	1	..	..	1	..	..	2	..	1	..	..	..	..	..	..	1	1	..	1	..	..	..	..	..	..	..	..	..	..	..
Dancing-masters	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Designers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..
Electricians	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1892.—Continued.

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Debility.	Diabetes.	Diarrhœa and Dysentery.	Dropsy.	Enteritis.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia.	Rheumatism.	Septicæmia.	Spinal Diseases.	Stomach Diseases.	Suicide.	Tuberculosis.
Inventors	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Journalists (Editors and Reporters)	3	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Lawyers	5	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2	..	..	..	..	..	..
Musicians	4	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Nurses	3	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Photographers and Lithographers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Physicians	14	..	..	2	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	2	1	1	..	2	..	..	..	..	4	..	..	..	..	..	..
Public Officers	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Sheriffs, Constables and Policemen	5	..	..	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..
Sculptors	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Students	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Teachers and Professors	5	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	..	1
Telephone and Telegraph Operators	2	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Veterinary Surgeons	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Total	68	4	..	7	..	1	..	2	3	1	9	4	..	2	..	..	1	..	..	3	5	3	1	7	..	..	..	1	12	1	..	..	..	..	1

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Debility.	Diabetes.	Diarrhœa and Dysentery.	Dropsy.	Enteritis.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia.	Rheumatism.	Septicæmia.	Spinal Diseases.	Stomach Diseases.	Suicide.	Tuberculosis.
III.																																			
OPTIONAL ACTIVITY.																																			
Agents and Canvassers	7		1				1	1			2									1									1						
Bankers and Brokers	5			1								1									1	1							1						
Bank Officers	1																										1								
Bar Tenders	5			1																									3				1		
Butchers and Marketmen	11	1		1		1				1	3										1			3											
Coal Dealers	2						1													1															
Dry Goods	2										1																								1
Fish and Oyster	2	1											1																						
Furniture	2						1		1																										
Grain	1																				1														
Ice	1										1																								
Junk	2			1																									1						
Liquor	13		1								1										2	2		2	1				2	1			1		
Lumber	1																									1									
Provision	1																		1																
Rubber	1	1																																	
Shoe	2	1																			1														
Stove	2									1											1														
Contractors and Builders	5			1			1														1				1				1						

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1892.—Continued.

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Debility.	Diabetes.	Diarrhœa and Dysentery.	Dropsy.	Enteritis.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia.	Rheumatism.	Septicæmia.	Spinal Diseases.	Stomach Diseases.	Suicide.	Tuberculosis.
Druggists and Apothecaries	3	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..
Grocers	10	1	..	1	1	1	..	..	1	1	..	..	..	..	..	..	1	..	..	..	..	..	..	2	..	..	..	..	1	..	..	..	..	..	..
Hotel and Innkeepers	9	1	1	..	..	..	..	..	..	1	1	2	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Saloon and Restaurant	9	..	..	2	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	1	1	..	2	..	..	..	..	..	..	..	..	..	..	1
Stable	6	1	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	2	..	..	..	..	..	..
Mail Carriers	2	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Manufacturers	18	..	..	5	..	..	..	..	1	..	..	1	1	..	..	..	..	..	..	1	3	..	..	1	..	..	..	..	2	1	..	..	2	..	..
Merchants	24	1	1	5	..	1	..	..	..	1	2	..	..	..	..	..	..	..	..	2	6	2	..	1	..	..	..	..	1	..	..	..	..	1	..
Railroad Officials	3	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Undertakers	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	1	..	..	..	..	..	..
Various and Unspecified Tradesmen	10	..	..	2	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	3	1	1	..	..	1	..	..	..	1	..	..
Total	163	9	4	20	1	3	4	2	5	6	15	4	2	..	..	1	1	..	1	5	22	7	1	15	4	2	1	..	18	2	..	..	5	1	2
IV.																																			
OUTDOOR.—*Local.*																																			
Boat-builders	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..
Wall	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..

OCCUPATIONS	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Debility.	Diabetes.	Diarrhœa and Dysentery.	Dropsy.	Enteritis.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia.	Rheumatism.	Septicæmia.	Spinal Diseases.	Stomach Diseases.	Suicide.	Tuberculosis.
Brick and Stone Layers..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	1	..	..	..	..	..	..
Carpenters and Joiners ..	79	7	1	7	..	..	..	2	1	4	10	3	..	..	..	3	..	1	..	..	10	5	..	3	..	6	1	..	13	..	..	..	..	2	..
Masons...............	31	3	..	3	..	..	..	..	..	..	1	2	..	..	1	..	..	..	1	..	5	..	1	2	1	1	..	..	9	..	..	1	..	..	..
Riggers...............	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Ship-carpenters	4	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2	..	..	..	..	..	..	..	..	..
Stonecutters and Marble-workers.............	13	3	1	..	..	..	..	..	..	1	3	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..
Tanners and Curriers....	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wheelwrights...........	3	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Total.............	137	13	2	12	..	..	..	2	2	5	14	9	..	..	1	3	..	2	1	..	16	6	2	6	1	9	1	..	25	..	1	1	1	2	..
V.																																			
INDOOR.—*Active.*																																			
Axe and Scythe Grinders	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bakers.	6	..	1	..	..	..	..	..	1	1	1	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Basket-makers...... ...	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Boiler.............	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Broom and Brush ...	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cabinet	5	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1892.—Continued.

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Debility.	Diabetes.	Diarrhœa and Dysentery.	Dropsy.	Enteritis.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia.	Rheumatism.	Septicæmia.	Spinal Diseases.	Stomach Diseases.	Suicide.	Tuberculosis.
Mattress Makers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Pattern	3	..	..	1	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Reed	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tool	3	..	..	..	..	..	..	..	..	..	2	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Beamers	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Bell-hangers	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Blacksmiths and Farriers	20	..	..	2	..	..	..	..	1	1	2	2	..	..	..	..	..	..	..	..	2	..	..	3	2	1	..	..	3	..	..	..	..	1	..
Bleachers and Fullers	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Brewers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..
Calico-printers	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Car Builders	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Carders	5	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	1	..	..	..	..	..	..
Colorers	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Confectioners	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Cooks and Caterers	3	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Decorators	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dyers	9	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	4	2	..	..	..	..	..	..	2	..	..	..	..	..	..
Foundrymen	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Furnacemen and Puddlers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gasfitters	6	..	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	1	1	1	..	..	..	..	..	1	..	..	..	..	..	..

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Debility.	Diabetes.	Diarrhœa and Dysentery.	Dropsy.	Enteritis.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia.	Rheumatism.	Septicæmia.	Spinal Diseases.	Stomach Diseases.	Suicide.	Tuberculosis.
Glassblowers	1																				1														
Pressers	1																					1													
Gun and Locksmiths	1																					1													
Hatters	1																							1											
Iron Rollers and Workers	4										2											1							1						
Machinists	63	3		5		1		2	2	5	10		1			1		1		1	7	5		5	1	1		1	7	2					2
Mechanics	3													1	1						1														
Melters	1																												1						
Miners	3	1																						1		1									
Moulders	14	2		2					1												2	2				2			3						
Painters and Glaziers	28	3		3							6			1	1						2	3		3		1		3	1				1		
Plasterers and Stucco-workers	5										2										1	1		1											
Platers, Electro.	1							1																											
Gold	1							1																											
Plumbers	10	4									1							1				1				1			2						
Pressmen	3			1																	1				1										
Superintendents and Overseers	24	2	1	3							3		2	2					1	1	2	2		1		2			2						
Tinsmiths	3										2									1															
Turners	1																												1						

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1892.—Continued.

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Debility.	Diabetes.	Diarrhœa and Dysentery.	Dropsy.	Enteritis.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Influenza	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia.	Rheumatism.	Septicæmia.	Spinal Diseases.	Stomach Diseases.	Suicide.	Tuberculosis.
Upholsterers	4	..	..	1	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wire-workers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Wood-turners	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Total	253	18	3	24	1	1	..	4	7	9	39	2	4	6	2	3	..	2	1	3	32	23	1	16	5	10	..	4	27	2	..	..	1	1	2
VI.																																			
INDOOR.—*Activity Restricted.*																																			
Barbers	4	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..
Bookbinders	2	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Book-keepers and Accountants	14	..	..	2	..	..	..	1	..	2	5	..	..	..	..	..	..	..	..	..	..	..	..	3	..	1	..	..	..	..	..	..	..	..	..
Chasers	4	1	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Cigarmakers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Clock and Watch	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Harness and Saddles	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rope	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..
Sail	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Shoe	17	..	..	..	1	..	..	..	..	1	2	1	..	2	..	1	..	..	..	..	..	3	..	..	..	2	..	..	2	..	..	1	..	..	1

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Debility.	Diabetes.	Diarrhœa and Dysentery.	Dropsy.	Enteritis.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia.	Rheumatism.	Septicæmia.	Spinal Diseases.	Stomach Diseases.	Suicide.	Tuberculosis.
Clerks and Salesmen	50	1	2	3	..	..	1	4	1	1	13	1	1	..	..	2	..	..	..	3	3	3	..	1	2	..	1	..	4	..	..	..	1	..	2
Enamelers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Engravers	8	..	..	1	..	1	..	..	..	..	1	..	..	..	..	..	..	..	..	..	2	1	..	..	..	..	..	..	..	..	..	..	1	1	..
File-cutters	6	..	..	1	..	..	..	..	1	..	3	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Finishers	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Brass	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Jewelers	32	..	..	2	..	..	..	..	2	..	10	1	..	..	..	..	..	..	..	..	4	2	..	4	..	..	1	..	5	..	1	..	..	..	..
Shell	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Lapidaries	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Millers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Operatives	82	6	1	4	..	2	1	2	1	1	17	2	1	1	..	..	1	..	..	4	7	2	..	10	4	2	1	..	8	1	..	..	2	..	1
Polishers	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Printers	7	..	..	..	..	..	..	1	1	..	4	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Roll-coverers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Rubber-workers	17	1	..	1	..	..	..	1	..	..	8	..	..	..	..	..	..	..	..	..	3	1	..	..	..	..	..	..	2	..	..	..	..	..	..
Silversmiths	3	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Tailors	13	..	..	3	..	..	..	..	..	..	1	2	.	1	..	..	1	..	..	1	1	..	..	1	..	..	..	..	2	..	..	..	..	..	..
Wool-sorters	6	..	..	2	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Total	278	9	3	19	1	3	3	9	7	6	74	7	2	4	..	3	3	..	..	8	28	13	..	21	6	6	3	..	27	2	1	1	4	1	4

Table XII.—OCCUPATIONS AND CAUSES OF DEATH, 1892.—Continued.

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Debility.	Diabetes.	Diarrhœa and Dysentery.	Dropsy.	Enteritis.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia.	Rheumatism.	Septicæmia.	Spinal Diseases.	Stomach Diseases.	Suicide.	Tuberculosis.
VII.																																			
OCCUPATIONS AT LARGE.																																			
Army Officers	1	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Base-ball players	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Boatmen	3	..	..	..	..	..	..	..	1	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Brakemen	8	8	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
CarDrivers andConductors	5	..	..	2	..	..	..	..	..	..	2	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Coachmen	8	..	..	..	..	..	..	1	..	..	3	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	2	..	..	..	..	..	..
Drivers	5	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	3	..	..	..	..	..	..
Engineers and Firemen	17	3	1	..	..	..	1	1	..	..	2	..	..	..	..	..	..	1	1	1	2	..	..	..	..	..	..	..	3	..	..	..	1	..	..
Expressmen	3	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Fishermen and Oystermen	7	..	..	1	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	1	..	..	2	..	1	..	..	..	..	..	..	..	..	..
Gripmen	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
House-movers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Mariners	3	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..
Peddlers	8	1	1	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	1	..	..	1	1	..	..	..	..	..	..	..	..	1	..
Sailors	6	1	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Sea Captains or Ship-Masters	7	..	..	2	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	2	..	1	..	..	..	..	..	..	..	..	..

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Debility.	Diabetes.	Diarrhœa and Dysentery.	Dropsy.	Enteritis.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia.	Rheumatism.	Septicæmia.	Spinal Diseases.	Stomach Diseases.	Suicide.	Tuberculosis.
Soldiers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Switchmen, Gatemen, etc.	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Teamsters	41	2	1	2	..	..	1	..	..	2	7	2	1	..	1	..	1	..	..	5	8	2	..	3	..	..	1	..	5	..	..	..	..	..	..
Total	127	15	5	9	..	..	3	3	2	2	20	3	2	..	1	1	1	1	1	7	14	3	..	9	2	3	1	..	17	..	..	..	1	1	..
VIII.																																			
No Special Employment.																																			
Butlers	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Gentlemen	3	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..
Hostlers	8	1	..	..	..	..	..	..	..	..	2	..	..	..	..	..	..	..	..	..	2	..	..	2	..	..	..	..	..	..	..	..	..	1	..
Janitors	3	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Laborers	451	58	4	27	3	8	1	7	20	7	76	9	4	5	3	4	1	1	5	13	43	29	3	11	10	13	7	5	59	3	1	1	6	3	4
Lamplighters	2	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	1	..	..	..	..	..	..	..	..	..
Linemen	2	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Porters	2	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..
Servants	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stevedores	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Stewards	4	..	..	1	1	..	..	1	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Ushers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..

TABLE XII.—OCCUPATIONS AND CAUSES OF DEATH, 1892.—Continued.

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Debility.	Diabetes.	Diarrhœa and Dysentery.	Dropsy.	Enteritis.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia.	Rheumatism.	Septicæmia.	Spinal Diseases.	Stomach Diseases.	Suicide.	Tuberculosis.
Waiters	10	..	..	1	..	..	..	1	..	1	4	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	1	..	..	..	1	..	..
Watchmen	4	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	2	1	..	..	..	..	..
Total	496	61	4	30	4	8	1	10	20	8	85	9	4	5	3	4	1	2	5	14	48	31	3	15	10	15	7	5	63	4	1	1	7	4	4
IX.																																			
EMPLOYMENTS OF WOMEN.																																			
Actresses	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Boatwomen	1	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Book-keepers	2	..	..	..	..	..	..	..	..	1	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
House	180	6	..	11	..	..	1	3	6	8	21	11	1	4	4	2	..	..	2	4	22	14	3	2	4	6	6	2	29	4	..	1	2	..	1
Braid Makers	1	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Chain	1	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..
Dress and Seamstresses	17	..	..	1	..	..	..	..	2	3	2	..	..	..	..	..	..	..	1	1	2	..	..	..	..	1	..	1	1	..	..	..	1	..	1
Clerks and Saleswomen	4	..	..	..	..	..	..	..	..	..	3	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	..	..	..	..	..
Cooks	4	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..	..	..	..	..	1	..	..	..	..	..	..	..	..	1	..	..	..	..	1
Housewives	32	..	..	5	..	..	..	2	..	2	4	..	1	2	1	..	..	2	..	1	2	1	..	2	..	2	..	..	4	..	..	..	..	..	1
Jewelers	1	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	..	1	..	..

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Debility.	Diabetes.	Diarrhœa and Dysentery.	Dropsy.	Enteritis.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia.	Rheumatism.	Septicæmia.	Spinal Diseases.	Stomach Diseases.	Suicide.	Tuberculosis.
Laboring	2																					1				1									
Laundresses	1																							1											
Milliners	2															1								1											
Nurses	2			1																		1													
Operatives	55	4		2			1		6		27					1					5			1		1		1	2	1	1		1		1
Physicians	1																												1						
Public Officers	1			1																															
Rubber-workers	1																			1															
Servants and Domestics.	19	1		1				1	2		1								1	1	1	2			1	2		2	2	1					
Sisters of Mercy	1																												1						
Tailoresses.	3										2																		1						
Teachers	18							1			7		1	1										1		1			3			1			2
Waitresses	1										1																								
Total	351	12	1	22	..	..	2	7	17	15	69	11	3	8	5	4	.	2	4	8	33	20	3	8	5	14	6	6	44	7	1	2	5	..	7

TABLE XII.—Continued.—OCCUPATIONS AND CAUSES OF DEATH, 1892.—RECAPITULATION.

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Debility.	Diabetes.	Diarrhœa and Dysentery.	Dropsy.	Enteritis.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Influenza	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia	Rheumatism.	Septicæmia.	Spinal Diseases.	Stomach Diseases.	Suicide.	Tuberculosis.
I. TILLERS OF THE SOIL...	178	4	3	17	..	5	4	3	7	9	9	6	1	4	2	..	..	..	1	1	27	15	2	9	1	21	..	3	19	..	..	..	2	1	2
II. PROFESSIONAL AND PERSONAL.............	68	4	..	7	..	1	..	2	3	1	9	4	..	2	..	..	1	..	..	3	5	3	1	7	..	..	..	1	12	1	..	..	..	..	1
III. OPTIONAL ACTIVITY....	163	9	4	20	1	3	4	2	5	6	15	4	2	..	..	1	1	..	1	5	22	7	1	15	4	2	1	..	18	2	..	..	5	1	2
IV. OUTDOOR.—*Local*......	137	13	2	12	..	..	..	2	2	5	14	9	..	..	1	3	..	2	1	..	16	6	2	6	1	9	1	..	25	..	1	1	1	2	..
V. INDOOR.—*Active*......	253	18	3	24	1	1	..	4	7	9	39	2	4	6	2	3	..	2	1	3	32	23	1	16	5	10	..	4	27	2	..	..	1	1	2

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder, Diseases of.	Bowel Diseases.	Brain, Diseases of.	Bronchitis.	Cancer.	Consumption.	Debility.	Diabetes.	Diarrhea and Dysentery.	Dropsy.	Enteritis.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Influenza.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia.	Rheumatism.	Septicæmia.	Spinal Diseases.	Stomach Diseases.	Suicide.	Tuberculosis.
VI. Indoor. — *Activity Restricted*.	278	9	3	19	1	3	3	9	7	6	74	7	2	4	..	3	3	..	..	8	28	13	..	21	6	6	3	..	27	2	1	1	4	1	4
VII. Occupations at Large. .	127	15	5	9	..	..	3	3	2	2	20	3	2	..	1	1	1	1	1	7	14	3	..	9	2	3	1	..	17	..	..	..	1	1	..
VIII. No Special Employment	496	61	4	30	4	8	1	10	20	8	85	9	4	5	3	4	1	2	5	14	48	31	3	15	10	15	7	5	63	4	1	1	7	4	4
IX. Employments of Women	351	12	1	22	..	..	2	7	17	15	69	11	3	8	5	4	..	2	4	8	33	20	3	8	5	14	6	6	44	7	1	2	5	..	7
All Classes	2051	145	25	160	7	21	17	42	70	61	334	55	18	29	14	19	7	9	14	49	225	121	13	106	34	80	19	19	252	18	4	5	26	11	22

TABLE XII.—SUPPLEMENTARY DISEASES.

OCCUPATIONS.	Whole Number.	Aneurism.	Cerebro-Spinal Meningitis.	Child Birth.	Cholera Morbus	Convulsions.	Croup	Diphtheria.	Gangrene.	Hernia.	Laryngitis.	Lung Diseases.	Measles.	Mumps.	Ovarian Dis's.	Pancreatis	Purpura Hemorrhagica.	Small Pox.	Pyæmia.	Syphilis.	Testicle Dis's.	Tetanus.	Tonsillitis.	Uterine Dis's.	Whooping C'gh	Unspecified and Ill-defined.
MALES.																										
Barbers	1																			1						
Book-keepers	1	1																								
Carpenters	1						1																			
Clerks	1									1																
Farmers	8				1				3			1								1						2
Firemen	1																						1			
Laborers	16				9				2	1								1		1						2
Machinists	2				1																					1
Manufacturers	3								1								1									1
Marble-workers	1																		1							
Masons	4								1	1		1										1				
Mechanics	1											1														
Merchants	2	1							1																	
Moulders	1								1																	
Operatives	4		1					1				1														1
Painters	1																									1
Paper Dealers	1				1																					
Pattern Makers	1		1																							
Peddlers	1																					1				
Physicians	1															1										
Plasterers	1										1															

OCCUPATIONS.	Whole Number.	Aneurism.	Cerebro-Spinal Meningitis.	Child Birth.	Cholera Morbus	Convulsions.	Croup.	Diphtheria.	Gangrene.	Hernia.	Laryngitis.	Lung Diseases.	Measles.	Mumps.	Ovarian Dis's.	Pancreatis.	Purpura Hemorrhagica.	Pyæmia.	Small Pox.	Syphilis.	Testicle Dis's.	Tetanus.	Tonsillitis.	Uterine Dis's.	Whooping C'gh.	Unspecified and Ill-defined.
Saloon Keepers	1									1																
Stable	1																									1
Ship Carpenters	1								1																	
Shoe Dealers	1																						1			
Silver Polishers	1							1																		
Stone-cutter	1								1																	
Superintendents	1													1												
Teamsters	2									1											1					
Wheelwrights	1				1																					
Wood Turners	1							1																		
	64	2	2	..	13	2	1	3	11	5	1	4	..	1	.	1	1	1	1	3	1	2	2	..	..	9
FEMALES.																										
Clerks	1					1																				
Cooks	1																									1
Housekeepers	6			4						1								1								
Housewives	5			3									1		1											
Operatives	5				2	1																			1	1
Servants	3				1										1									1		
Total	21	..	..	7	3	2	..	..	..	1	..	..	1	..	2	..	..	1	..	..	..	..	..	1	1	2
Grand total	85	2	2	7	16	2	1	3	11	6	1	4	1	1	2	1	1	2	1	3	1	2	2	1	1	11

RESULTS AND OBSERVATIONS.

GENERAL SUMMARY.

The number of births registered in the State of Rhode Island, during the year 1892, was nine thousand two hundred and seventy (9,270); the number of marriages, three thousand five hundred and two (3,502); and the number of deaths, seven thousand three hundred and ninety-six (7,396).

TABLE XIII.

General Results of Registration for ten years, 1854–63, and for each of the last twenty-nine years.

Years.	Whole Number of Births.	Still-born.	Living Births.	Marriages.	Deaths.
1854-1863	38,042	1,471	36,571	14.943	21,230
1864	3,892	138	3,754	1,844	3,360
1865	3,955	177	3,778	1,896	3,405
1866	4,902	172	4,730	2,318	2,970
1867	5,127	163	4,964	2,344	2,889
1868	5,372	212	5,160	2,285	2,912
1869	5,245	220	5,025	2,289	3,382
1870	5,215	234	4,981	2,362	3,238
1871	5,678	223	5.455	2,336	3,344
1872	6,143	202	5.941	2,537	4,247
1873	6,022	228	5,794	2,630	4,403
1874	6,466	277	6,189	2,541	4,229
1875	6,508	246	6,262	2,485	4,317
1876	6,329	224	6,105	2.253	4,116
1877	6,235	242	5,993	2,282	4.450
1878	6,714	218	6,466	2,324	4.441
1879	6,350	216	6,134	2,396	4,472
1880	6,295	192	6,103	2,769	4,829
1881	6,761	264	6,497	2,750	5,016
1882	6,825	253	6,572	2,634	5,074
1883	7,046	253	6,793	2,611	5,282
1884	7,305	272	7,033	2,558	5,111
1885	7,028	271	6,757	2,488	5,389
1886	7,621	293	7,328	2,750	5,849
1887	7,668	276	7,392	2,839	6,340
1888	7,840	295	7,545	3,022	6,594
1889	8,220	329	7,891	3,029	6,259
1890	8,559	296	8,251	3,195	6,934
1891	9,426	272	9,154	3,320	6,620
1892	9,270	343	8,927	3,502	7,396

During the period of thirty-nine years there were recorded, in Rhode Island, 228,050 births, of which number 8,927 were still-born, and 219,123 were living children.

During the same period there were recorded 89,531 marriages, or 179,062 persons married, and 161,128 deaths.

These results show that in every 25.6 births there was one still-born child, or that in every 1,000 births there were about 39 still-born and 961 living children.

The same results also show that the ratio of whole number of living births to the whole number of persons married, and to the whole number of decedents respectively, during the same period, were as follows:

	Of persons married,		Of deaths,
For every 100 living births there were	81.7	and	73.5

The number of births in 1892 was 156 less than the previous year; the number of marriages 182 larger, or 364 more persons married; and a decrease of 776 deaths.

In 1890,

	Of persons married,		Of deaths,
For every 100 living births there were	77.4	and	83.8

In 1891,

	Of persons married,		Of deaths,
For every 100 living births there were	72.5	and	72.3

In 1892,

	Of persons married.		Of deaths,
For every 100 living births there were	78.5	and	82.8

The last decrease in the number of births occurred in 1885, the decrease being 277.

A decrease also occurred in the years 1869, 1870, 1873, 1876, 1877, 1879 and 1880. The greatest decrease was 364, in 1879.

TABLE XIV.

Comparative Exhibit of Births, Marriages and Deaths in each Town in Rhode Island, in each of the Six Years 1887—1892, and Excess of Births over the Deaths in 1892.

TOWNS AND DIVISIONS OF THE STATE.	BIRTHS.						MARRIAGES.						DEATHS.						Excess of Births over Deaths.
	1887.	1888.	1889.	1890.	1891.	1892.	1887.	1888	1889.	1890.	1891.	1892.	1887.	1888.	1889.	1890.	1891.	1892.	
Barrington	18	27	25	32	26	18	6	12	5	16	7	5	20	20	21	25	24	25	—7
Bristol	116	100	104	89	126	93	36	23	37	51	40	48	119	127	86	115	107	102	—9
Warren	94	87	102	105	80	87	33	39	33	42	37	36	78	104	101	113	108	105	—18
BRISTOL COUNTY	228	214	231	226	232	198	75	74	75	109	84	89	217	251	208	253	239	232	—34
Coventry	95	103	104	104	125	93	22	33	23	32	26	31	67	81	100	88	100	131	—38
East Greenwich	71	73	68	71	71	82	31	26	37	41	39	33	44	69	58	67	58	72	10
West Greenwich	22	20	10	20	16	10	5	4	5	...	1	...	9	14	18	16	14	14	—4
Warwick	322	362	424	441	493	480	127	126	159	157	159	171	223	241	281	299	328	381	99
KENT COUNTY	510	558	606	639	705	665	185	189	224	230	225	235	343	408	457	470	500	598	67
Jamestown	6	2	5	3	15	20	4	3	5	1	6	6	11	8	4	4	6	18	2
Little Compton	7	4	20	5	11	7	9	5	11	9	5	8	14	13	8	22	23	23	—16
Middletown	33	29	25	29	28	37	6	5	5	3	7	13	15	22	17	9	24	24	13
NEWPORT CITY	632	599	712	665	675	488	123	125	135	180	150	151	313	319	323	348	436	404	84
New Shoreham	24	16	28	28	31	29	13	14	7	12	8	11	22	21	20	19	22	35	—6
Portsmouth	26	23	17	20	27	25	9	10	11	9	14	14	17	24	20	21	22	28	—3
Tiverton	79	63	79	68	78	72	11	22	16	18	24	30	49	51	50	49	65	59	13
NEWPORT COUNTY	807	736	886	818	865	678	175	184	190	232	214	233	441	458	442	472	598	591	87

TABLE XIV.—Continued.

TOWNS AND DIVISIONS OF THE STATE.	BIRTHS.						MARRIAGES.						DEATHS.						Excess of Births over Deaths.
	1887.	1888.	1889.	1890.	1891.	1892.	1887.	1888.	1889.	1890.	1891.	1892.	1887.	1888.	1889.	1890.	1891.	1892.	
Burrillville	99	130	74	86	138	108	36	55	40	34	44	50	75	123	99	106	85	110	—2
*Cranston	157	142	154	152	170	159	34	34	42	61	40	38	102	100	103	120	122	125	34
Cumberland	164	208	195	198	161	208	72	77	89	81	71	93	140	177	141	159	167	174	34
East Providence	131	175	115	168	197	203	55	67	65	66	66	67	96	120	130	131	144	159	44
Foster	20	19	23	16	22	12	12	9	12	8	19	19	33	19	25	17	27	23	—11
Glocester	43	42	54	44	50	43	7	10	6	8	9	7	39	39	41	46	46	50	— 7
Johnston	140	197	251	245	176	290	26	33	41	59	57	64	172	161	132	156	106	131	159
Lincoln	595	602	595	657	751	701	114	155	136	145	180	170	413	434	355	462	365	450	251
North Providence	30	35	48	46	43	30	7	3	2	4	2	7	22	38	31	43	46	43	—13
North Smithfield	70	60	65	55	58	74	23	25	23	22	23	25	36	42	62	29	39	41	33
PAWTUCKET CITY	620	648	655	697	739	726	316	300	278	262	313	331	553	557	524	606	537	642	84
PROVIDENCE CITY	2,963	3,053	3,173	3,146	3,954	3,953	1,284	1,349	1,367	1,408	1,488	1,592	2,640	2,644	2,516	2,876	2,630	2,964	989
Scituate	54	54	61	81	57	74	50	40	38	44	33	42	59	55	57	48	59	64	10
Smithfield	35	43	47	45	39	28	16	30	23	8	24	22	27	53	53	45	44	53	—25
WOONSOCKET	541	535	563	570	673	718	163	174	205	201	228	220	444	442	425	428	441	445	268
PROVIDENCE COUNTY	5,662	5,943	6,073	6,486	7,228	7,322	2,215	2,361	2,367	2,411	2,597	2,747	4,851	5,004	4,694	5,272	4,858	5,474	1,848
Charlestown	16	8	17	11	12	9	2	6	5	5	4	5	21	19	9	11	15	19	—10
Exeter	13	13	8	14	7	11	8	18	4	12	9	12	18	11	21	13	16	19	—8
Hopkinton	56	47	58	53	41	51	44	31	39	27	30	31	32	50	42	36	38	59	—8
Narragansett	...	21	21	22	25	21	...	8	4	4	3	6	....	16	17	17	19	11	10
North Kingstown	82	81	67	61	80	61	23	27	24	31	36	28	80	69	64	51	42	60	1
South Kingstown	111	77	90	79	66	88	45	45	29	57	45	40	62	59	56	60	53	71	17
Richmond	36	29	47	35	33	34	3	6	3	8	10	12	33	26	27	31	20	32	2
Westerly	147	111	116	106	132	132	64	73	65	69	63	64	105	118	102	99	106	97	35
WASHINGTON COUNTY	461	389	424	381	396	407	189	214	173	213	200	198	351	368	338	318	309	368	39
STATE INSTITUTIONS	....	....	....	....	....	....	....	....	....	....	....	....	137	105	120	....	116	133	......
WHOLE STATE	7,668	7,840	8,220	8,550	9,426	9,270	2,839	3,022	3,029	3,195	3,320	3,502	6,340	6,594	6,259	6,934	6,620	7,396	1,874

---

* Exclusive of deaths in State Institutions.

The varying numbers of the events of births, marriages and deaths occurring in the different towns, during each of the six years ending December 31, 1892, are very concisely presented in Table XIV, and a ready means is thereby afforded of comparing and studying the changes in the vital movements of the people in the different precincts, during those years.

The increase of population in the State, for the ten years 1880 to 1890, was about twenty-five per cent., or an annual average of two and one-half per cent. Doubtless the increase of population, during 1892, was not less than the average of the previous ten years, and, if so, the increase by immigration must have been nearly twice as large as the natural increase.

TABLE XV.

Births, Marriages and Deaths in Rhode Island, in 1892, with the number and ratio of each in every 1,000 of the Population of each Town, and the ratio of excess of the Births over the Deaths in every 1,000 of the Population.

TOWNS AND DIVISIONS OF THE STATE.	Estimated Population in 1892.	Births.	Births per 1,000 of Population.	Marriages.	Persons Married pr 1,000 of Population.	Deaths.	Deaths per 1,000 of Population.	Excess of Births per 1,000.
Barrington	1,500	18	11.9	5	6.6	25	16.6	—4.7
Bristol	5,500	93	16.9	48	17.1	102	18.6	—1.7
Warren	4,605	87	18.9	36	15.6	105	22.8	—3.9
BRISTOL COUNTY	11,615	198	17.0	89	15.3	232	20.0	—3.0
Coventry	5,175	93	18.0	31	12.0	131	25.3	—7.3
East Greenwich	3,300	82	24.8	33	20.0	72	21.8	3.0
West Greenwich	775	10	12.9	.....	.....	14	18.1	—5.2
Warwick	19,625	480	24.5	171	17.4	381	19.4	5.1
KENT COUNTY	28,875	665	23.0	235	16.3	598	20.7	2.3
Jamestown	850	20	23.5	6	14.1	18	21.2	2.3
Little Compton	1,150	7	6.1	8	14.0	23	20.0	—13,9
Middletown	1,160	37	31.9	13	22.4	24	20.7	11.2
NEWPORT CITY	20,006	488	24.4	151	16.0	404	20.0	4.4
New Shoreham	1,350	29	21.5	11	16.3	35	25.9	—4.4
Portsmouth	1,925	25	13.0	14	14.5	28	14.5	—1.5
Tiverton	2,925	72	24.6	30	20.5	59	20.1	4.5
NEWPORT COUNTY	29,366	678	23.1	233	15.9	591	20.1	3.0
Burrillville	5,625	108	19.2	50	17.8	110	19.6	—0.4
Cranston*	7,600	146	19.2	38	10.0	125	16.4	2.8
Cumberland	8,512	208	24.4	93	21.9	174	20.4	4.0
East Providence	9,170	203	22.1	67	14.6	159	17.3	4.8
Foster	1,205	12	9.9	19	31.5	23	19.1	—9.1
Glocester	2,180	43	19.8	7	6.4	50	22.9	—3.1
Johnston	10,885	290	26.6	64	11.8	131	12.3	14.3
Lincoln	20,650	701	33.1	170	16.5	450	21.8	11.3
North Providence	2,340	30	12.8	7	6.0	43	18.4	—5.6
North Smithfield	3,205	74	23.1	25	15.6	41	12.8	10.3
PAWTUCKET	29,640	726	24.5	331	22.3	642	21.7	2.8
PROVIDENCE CITY	142,150	3,953	27.8	1,592	22.4	2,964	20.9	6.8
Scituate	3,080	74	24.0	42	27.2	64	20.8	3.2
Smithfield	2,550	28	11.0	22	17.3	53	20.8	—9.8
WOONSOCKET	22,830	713	31.2	220	19.3	445	19.5	11.7
PROVIDENCE COUNTY	271,622	7,309	26.9	2,747	20.2	5,474	20.2	6.7
Charlestown	900	9	10.0	5	11.1	19	21.1	—11.1
Exeter	950	11	11.6	12	25.6	19	20.0	—8.4
Hopkinton	2,890	51	17.6	31	21.5	59	20.4	—2.8
Narragansett District	1,530	21	13.7	6	7.8	11	6.1	7.6
North Kingstown	4,300	61	14.2	28	13.0	60	14.0	0.2
South Kingstown	4,940	88	17.8	40	16.2	71	14.3	3.5
Richmond	1,610	34	21.1	12	14.9	32	19.9	1.2
Westerly	7,050	132	18.7	64	18.2	97	13.8	4.9
WASHINGTON COUNTY	24,170	407	16.8	198	16.2	368	15.2	1.6
STATE INSTITUTIONS	1,600	13	8.1	.....	.....	133	83.1	—75.0
WHOLE STATE	367,248	9,270	25.2	3,502	19.1	7,396	20.1	5.1

* Not including State Institutions.

BIRTHS. *Proportion to Population.*

In Table XV, on the preceding page, may be found the varying proportions of the number of births, marriages and deaths to every 1,000 of the population in the various towns and cities in the State, as they occurred in 1892.

In regard to births, the extreme range of proportion to population was from 6.1 in every 1,000, in Little Compton, to 33.1 in Lincoln. Following Lincoln, in the line of largest proportion, are Middletown, with 31.9; and Woonsocket, with 31.2. Following Little Compton, in the line of the smallest proportion of births to population, are Foster, with 9.9 in every 1,000, and Charlestown, 10.0.

The proportions of births to population in all the counties entire, and in the cities of Providence, Pawtucket, Newport, Woonsocket, and the whole State, during the last seven years, are as follows:

BIRTHS TO EVERY 1,000 PERSONS.

	1892.	1891.	1890.	1889.	1888.	1887.	1886.
Bristol County	17.0	19.9	19.8	19.6	18.1	19.6	20.9
Kent County.	23.0	25.3	23.8	26.6	24.6	23.0	22.8
Newport County	23.1	29.7	28.6	29.4	24.1	20.0*	*18.9
Newport City	24.4	33.8	34.2	33.5	28.2	30.9	29.3
Providence County	26.9	27.7	27.2	24.8	24.9	25.0†	†27.2
Pawtucket City	24.5	25.8	25.2	25.7	25.0	25.0	22.5
Providence City	27.8	29.3	25.9	24.9	24.4	24.3	24.7
Woonsocket	31.2	29.9	27.4	26.2	26.8	28.5	27.5
Washington County	16.8	16.2	16.1	18.3	16.9	20.4	20.3
Whole State	25.2	26.5	24.7	24.1	24.2	24.2	24.5

PERSONS MARRIED. *Proportion to Population.*

The proportion to the population, of persons married, can be more correctly shown in counties, or in cities and aggregates of towns, than in single towns.

The following summary will present the proportions in the manner suggested, for the last seven years:

---

* Newport county towns.

† Providence county towns.

PERSONS MARRIED IN EVERY 1,000.

	1892.	1891.	1890.	1889.	1888.	1887.	1886.
Bristol County	15 3	14.4	19.1	12 7	12.5	12.8	13.6
Kent County	16.3	16.3	17.2	19.7	16.7	16.8	16.9
Newport County	15 9	14.7	16.3	12.6	12.2	11.8*	*11.6
Newport City	16.0	15.0	18.5	12.7	11.7	12.0	13.1
Providence County	20.2	19.9	20.3	19.3	19.8	15.4*	*15.9
Pawtucket	22.3	21.9	19.0	21.8	23.5	24.6	20.0
Providence City	22.4	22.0	21.3	21 1	21.6	21.0	20.8
Woonsocket	19.3	20 3	19.3	19.1	17.4	17.2	16.1
Washington County	16.2	16.3	17.1	14.9	18.7	16 6	15.9
Whole State	19.1	18.7	18.5	18.4	18.7	18.0	17.7

DEATHS. *Proportion to Population.*

The number of deaths, in proportion to the living population, varies considerably from year to year in the different towns. The smaller the towns the greater, generally, is the annual variation.

The highest rate occurred in New Shoreham, that is, 25.9 in every 1,000 of the population; followed by Coventry, 25.3, and Glocester, 22.9.

Several of the country towns had larger death-rates than either of the cities.

The lowest death-rate was in the district of Narragansett, that is, 6.1 in every 1,000 of the population; followed by Johnston, with 12.3, and North Smithfield, with 12.8.

The following summary will give the ratios of mortality to the population in the cities and counties of the State, during the seven years ending December 31, 1892:

DEATHS IN EVERY 1,000 OF POPULATION.

	1892.	1891.	1890.	1889.	1888.	1887.	1886.
Bristol County	20 0	20.5	22.1	17 6	21.3	18.2	19.2
Kent County	20.7	18 0	17.6	20.1	18.4	15.5	17 5
City of Newport	20.0	21.8	17.9	15.2	15 0	15.3	15.1
Newport County	20 1	20.6	16.5	14.7	18.0	15.2	15.0
Pawtucket	21.7	18 8	21.9	20.5	21.8	22.3	19.0
City of Providence	20.9	19.5	21.7	19.7	21 0	21.6	19.6
Woonsocket	19.5	19.6	20 5	19.8	22.1	23.4	19.5
Providence County	20.2	18.6	22.1	19.2	21.0	21.0	19.2
Washington County	15.2	12 6	13.5	14.6	16.0	15.5	15.0
Whole State	20.1	18.6.	20.7	19 0	20 4	19.9	18.8

---

* County towns.

The proportion of deaths to the living population, in 1892, was larger than the annual average of the previous six years, in the cities of Newport and Pawtucket, in Bristol, Kent, Newport and Washington counties, and in the entire State, and about the same in the cities of Providence and Woonsocket, and in Providence county.

TABLE XVI.

Proportion of Births, Marriages and Deaths to the Population, in the whole State, in each of the last twenty-four years.

YEARS.	BIRTHS.		MARRIAGES		DEATHS.		
	Number.	Of population one birth in every	Number.	Of population one person married in every	Number.	Of population one death in every	Deaths in every 1,000 of the population.
1869.	5,245	41.4	2,289	47.5	3,382	64.2	15.6
1870.	5,215	41.7	2,362	45.0	3,238	67.1	14.9
1871.	5,678	38.2	2,336	46.5	3,441	65.0	15.4
1872.	6,143	35.4	2,537	42.9	4,247	51.2	19.5
1873	6,022	36.1	2,630	41.3	4,403	49.4	20.3
1874.	6,466	39.9	2,541	50.8	4,229	61.1	16.4
1875.	6,508	39.7	2,485	52.0	4,317	59.8	16.7
1876	6,329	40.8	2,253	57.3	4,116	62.7	15.9
1877	6,235	41.4	2,282	56.6	4,450	58.0	17.2
1878.	6,714	38.5	2,324	55.7	4,411	58.1	17.2
1879	6,350	43.6	2,396	57.8	4,472	61.9	16.0
1880	6,295	43.9	2,769	49.9	4,829	57.4	17.5
1881	6,761	40.9	2,750	50.3	5,016	55.1	18.1
1882	6,825	40.5	2,634	52.5	5,074	54.5	18.3
1883.	7,016	39.2	2,611	52.9	5,282	52.4	19.1
1884	7,305	41.7	2,558	59.4	5,111	59.2	16.1
1885	7,028	43.3	2,488	61.3	5,389	56.4	17.7
1886.	7,621	40.8	2,770	56.5	5,818	53.2	18.8
1887	7,668	41.3	2,839	55.8	6,310	50.0	19.9
1888.	7,840	41.1	3,022	53.5	6,591	50.0	20.4
1889	8,220	40.9	3,024	55.4	6,259	52.6	19.0
1890.	8,550	40.8	3,195	54.0	6,931	49.8	20.7
1891.	9,126	37.7	3,320	53.5	6,620	53.5	18.6
1892.	9,270	39.6	3,502	52.4	7,396	49.7	20.1

During the ten years 1871–1880, the average annual birth-rate was one birth in every 39.7 of the population, or 25.2 births in every 1,000; during the ten years 1881–1890, the average birth-rate was one birth in every 41.0 of the population, or 24.3 in every 1,000, a falling off of a proportion of nearly one birth in every 1,000 of the population.

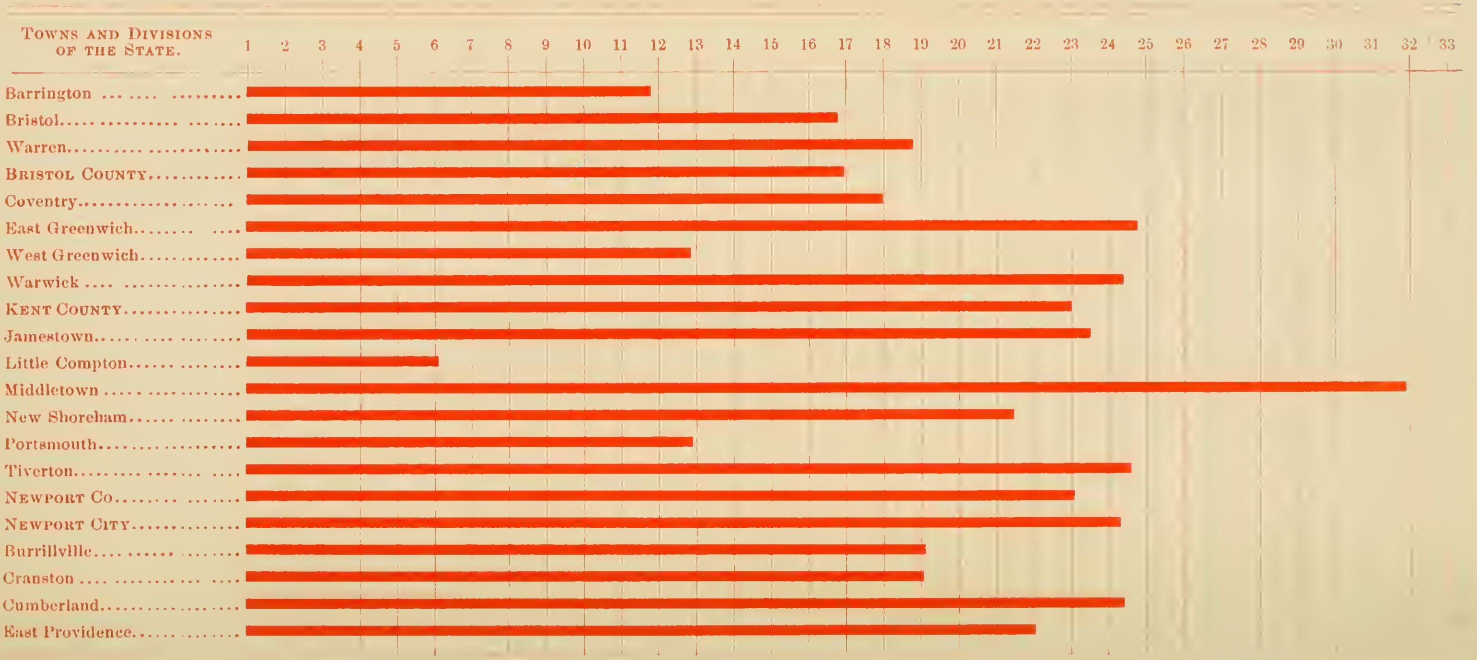
During the period of ten years 1871–1880, the average annual death-rate was one in every 58 4 of the population, or 17.2 in every 1,000, according to the returns. During the ten years 1881–1890 the average annual death rate was one in every 53.3 of the population, or 18.8 in every 1,000 of the living.

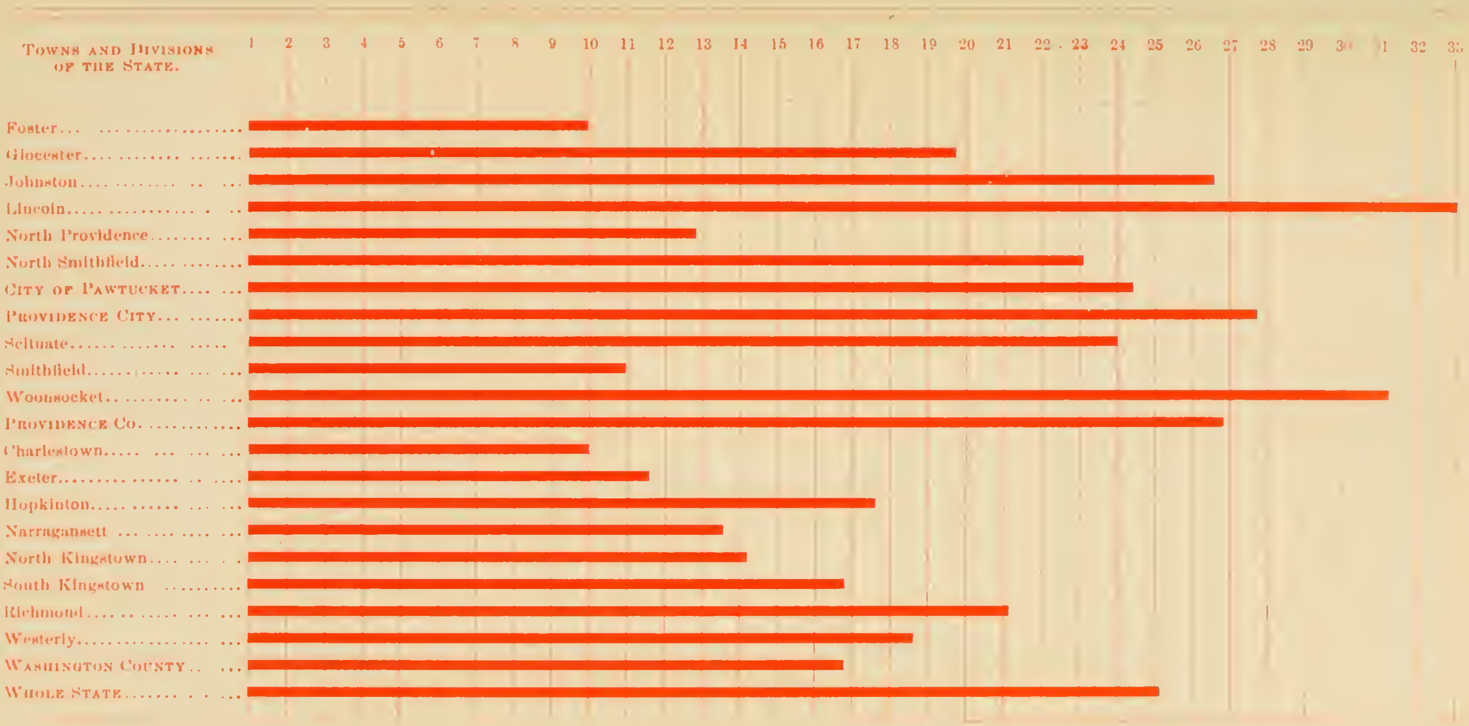
It must be remembered, however, that the returns during the last ten years have been more complete than in previous years.

BIRTH RATES.

Diagram I.—Showing the number of births in every 1000 of the population, in each town and each county in the State during the year 1892, computed upon an estimated increase of the population by the Census of 1890.

For explanation see foot note on next page.





The figures at the top of the perpendicular lines indicate, in whole numbers, the number of births during the year in every 1000 persons. The spaces are fractional parts of one. For instance, the heavy horizontal line against Barrington, at the top of this diagram, reaches across about nine-tenths of the space between the perpendicular lines 11 and 12. It shows the birth rate of Barrington, in 1892, was about eleven and nine-tenths in every 1000 of the population.

BIRTHS, 1892.

The general statistics of births in Rhode Island, during the year 1892, derived from the returns sent to the office of the State Registrar, may be found on pages 2 to 8, inclusive, in Tables I, II and III.

The whole number reported is 9,270, as before stated, and is 156 less than the number in 1891.

SEX OF THE CHILDREN BORN.

Of the 9,270 children whose births were registered in 1892, there were 4,765 males and 4,505 females. This gives 105.8 males to each 100 females, or 514.1 males and 485.9 females in each 1,000 children.

The following Table shows the numbers and sex, and the proportions of each sex of the children born in Rhode Island, during the ten years 1854–1863, and in each of the last twenty-nine years:

Table XVII.

Years.	Males.	Females.	Males to each 100 Females.	Per 1,000 Births Males.	Females.
1854-1863	19.356	18,686	103.6, or	508.8 and	491.2
1864	1,919	1,942	100.3, or	500.9 and	499.1
1865	2,096	1,857	112.9, or	530.2 and	469.8
1866	2,546	2.356	108.0. or	519 4 and	480.6
1867	2.665	2,464	107.0, or	518.7 and	481.3
1868	2,745	2.627	104.5, or	511.0 and	489.0
1869	2,685	2,560	104.9, or	511.9 and	488.1
1870	2,679	2,536	105.6. or	513.7 and	486.3
1871	2,878	2,800	102.8, or	506.9 and	493.1
1872	3,085	3,058	100.9, or	502.2 and	497.8
1873	3,135	2,887	108 6, or	520.6 and	479.4
1874	3,311	3,155	104.9, or	512.1 and	487.9
1875	3,362	3,146	106.9, or	516.6 and	483.4
1876	3,291	3.038	108.3, or	520.0 and	480.0
1877	3,163	3 072	103.0, or	507.3 and	492.7
1878	3,402	3,312	102.7, or	506.7 and	493.3
1879	3,259	3,091	102.4, or	513 2 and	486.8
1880	3,241	3.054	106.8, or	514.8 and	485.2
1881	3.498	3,263	107 2, or	517.3 and	482.7
1882	3,509	3,316	105.8, or	514 1 and	485.9
1883	3,518	3,498	101.4, or	503 5 and	496.5
1884	3,713	3,592	103 4, or	508.3 and	491.7
1885	3,591	3,437	104.4, or	510.3 and	489.7
1886	3,897	3.724	104.6, or	511.3 and	488.7
1887	3,968	3,700	107 2, or	517 5 and	482.5
1888	4.023	3,817	105.4, or	513.1 and	486.9
1889	4,193	4,027	104.1, or	510.0 and	490.0
1890	4,351	4,199	103.5, or	508.8 and	491.2
1891	4,926	4.500	109 5, or	522.6 and	477.4
1892	4,765	4,505	105 8, or	514.1 and	485.9

The average proportion for thirty-nine years is 105.3 males to every 100 females. At the end of five years from birth the number of each sex is about equal, the males having a larger mortality during that period.

PROPORTION OF THE SEXES *Localities.*

In Table II, on pages 6 and 7, will be found the number of children born in the different divisions of the State during the year 1892, together with the number of each sex.

The following Table will give more concisely the whole number of children born, arranged according to sex and locality, and the proportion of male children to every 100 female children :

Table XVIII.

BIRTHS, 1892.	Bristol County.	Kent County.	Newport County.	Providence County Towns	Washington County.	Newport City.	Pawtucket.	Providence City.	Woonsocket.	Whole State.
Males	108	336	96	1,014	202	247	398	1,977	387	4,765
Females	90	329	94	916	205	241	328	1,976	326	4,505
Total	198	665	190	1,930	407	488	726	3,953	713	9,270
Males to each 100 females	120.0	102.1	102.1	110.7	98.5	102.5	121.3	100.0	118.7	105.8

The proportion of the sexes of children born in 1892 did not vary greatly in Newport and Washington counties, and in the cities of Newport and Providence.

In Providence the difference was but one, and in Newport county but two.

Compared with the previous year the decrease in the proportion of male births in the whole State was about 4.5 per cent.

The following Table exhibits the proportions of births of the sexes for the past thirty years in the larger divisions of the State and in the whole State :

TABLE XIX.

NUMBER OF MALES TO EACH 100 FEMALES.

BIRTHS.	Bristol County	Kent County.	Newport County.	Providence County, Towns.*	Providence City.	Washington County.	Whole State
1863	120.0	98.4	97.0	101.8	111.4	108.7	105.8
1864	106.8	87.3	90.6	107.1	97.3	103.1	100.3
1865	119.3	118.2	108.8	118.8	113.8	88.1	112.9
1866	109.1	113.1	103.4	104.9	108.4	121.0	108.0
1867	115.5	98.3	117.8	106.3	104.5	120.4	107.7
1868	117.4	88.7	100.2	101.6	102.4	136.5	104.5
1869	115.7	116.7	102.7	98.0	107.5	120.6	104.9
1870	126.4	111.6	100.0	105.1	104.9	99.5	105.6
1871	131.8	97.9	132.5	100.8	95.2	113.3	102.8
1872	109.2	92.8	109.1	103.5	95.7	110.6	100.9
1873	129.2	113.0	117.9	104.5	109.0	104.7	108.6
1874	98.7	111.9	101.3	110.4	102.9	94.0	104.9
1875	95.2	103.1	97.7	104.3	109.1	134.3	106.9
1876	142.1	104.4	108.5	108.0	106.8	103.7	108.3
1877	138.7	102.4	98.5	100.3	104.9	95.3	103.0
1878	120.5	120.6	94.8	101.5	106.8	78.8	102.7
1879	124.3	95.5	103.6	105.4	105.7	106.3	105.4
1880	117.2	110.5	113.5	102.4	107.6	95.4	106.1
1881	91.2	111.3	102.0	105.9	109.0	115.7	107.2
1882	94.7	110.2	112.5	103.1	106.5	105.7	105.8
1883	94.0	97.6	97.0	103.5	102.2	102.2	101.4
1884	105.0	111.7	92.9	102.5	105.8	99.0	103.4
1885	132.2	107.3	98.0	101.8	103.6	101.3	101.4
1886	120.0	81.7	102.6	106.7	105.0	121.7	104.6
1887	115.1	121.7	106.6	103.9	107.9	106.7	107.2
1888	98.1	105.1	105.0	103.4	107.4	110.2	105.4
1889	81.9	122.0	107.5	103.6	101.4	110.2	104.1
1890	96.5	113.0	106.8	108.5	98.3	97.4	103.6
1891	107.1	110.4	118.4	107.0	109.1	106.4	109.5
1892	120.0	107.1	102.4	110.7	100.0	98.5	105.8

There will be found in the following summary in the aggregate, the average number of males to each 100 females, born during the thirty years from 1863–1892, in the different divisions of the State:

---

* Including cities of Pawtucket and Woonsocket.

Bristol County	112.7 males to each 100 females.
Kent County	106.2 males to each 100 females.
Newport County	108.9 males to each 100 females.
Providence County Towns*	107.4 males to each 100 females.
Providence City	104.5 males to each 100 females.
Washington County	103.4 males to each 100 females.
Whole State	106.5 males to each 100 females.

BIRTHS AND SEASON.

Table II, on pages 6 and 7 of this report, gives the number of births occurring in the different months of the year, in the several divisions of the State.

According to this Table, the greatest number of births in any one month, in 1892, occurred in December, and the largest in any quarter in the fourth.

The following Table shows the total number of children born in the State of Rhode Island, according to the returns, in each quarter of each of the last six years; and also the aggregate number and the percentage of the aggregate of each quarter in thirty-five years, from 1854 to 1888, inclusive:

TABLE XX.

QUARTERS.	1892.	1891.	1890.	1889.	1888.	1887.	1854 to 1888, inclusive.	
							Number.	Per cent.
January—March	2,233	2,195	1,951	1,864	1,862	1,828	45,560	23.66
April—June	2,179	2,271	2,083	2,024	1,833	1,859	45,491	23.62
July—September	2 422	2,454	2,224	2,160	2.084	1,956	50,306	26.12
October—December	2,436	2,506	2,292	2,172	2,061	2,025	51,227	26.60
Whole Year	9,270	9,426	8,550	8,220	7,840	7,668	192,583	100.00

Table XX presents results showing that, according to the registration of thirty-nine years, the average proportions of births to the whole number of births in the different quarters of the year, were as follows:

January—March	236.8 in every 1,000 births
April—June	237.4 in every 1,000 births.
July—September	260.8 in every 1,000 births.
October—December	264.9 in every 1,000 births.

The proportions of births in Rhode Island, in the different quarters of the year, to the whole number of births in 1892, were as follows:

---

* Including Pawtucket and Woonsocket.

1. January—March	24.1 per cent., or	241 in every 1,000
2. April—June	23.5 per cent , or	235 in every 1,000
3. July—September	26.1 per cent., or	261 in every 1,000
4. October—December	26.3 per cent , or	263 in every 1,000

First six months	476 births in every 1,000 of whole number.
Second six months	524 births in every 1,000 of whole number.

BIRTHS. *Sex and Season.*

In Table II, on pages 6 and 7, will also be found the number of births of *each sex* by months, as they occurred in the different divisions of the State, during the year 1892. From it we ascertain the number of *each of the sexes* born during each quarter of the year, with their relative proportions, and also the aggregates and proportions of the same for the whole State.

The following Table will present a summary of the quarterly periods, number of births, and proportions of the sexes, for the same year:

	Males.	Females.	Males to each 100 Females.	Per 1,000, each quarter. Males.	Per 1,000, each quarter. Females.
1. January—March	1,139	1,094	104.1	510	490
2. April—June	1,101	1,078	102.1	505	495
3. July—September	1,261	1,161	108.6	521	479
4. October—December	1,264	1,172	107.8	515	485
Whole year, 1892	4,765	4.505	105.8	514	486

The following Table shows the number of male children born to every 100 female children, in each quarter of the last four years; and also the proportion of births of male children to each 100 female children born, during four periods of five years each, from 1866 to 1885, inclusive:

TABLE XXI.

YEARS.	1892.	1891.	1890.	1889.	5 years, 1881-1885.	5 years, 1876-1880.	5 years, 1871-1875.	5 years, 1866-1870.
First Quarter	104.1	104.4	108.6	105.7	105.8	106.0	101.5	106.7
Second Quarter	102.1	107.6	106.6	97.3	101.8	102.7	101.7	107.3
Third Quarter	108.6	118.2	100.3	101.1	105.1	107.1	101.8	106.0
Fourth Quarter	107.8	107.8	103.0	109.4	102.5	108.2	106.5	104.8
Total average	105.8	109.5	101.6	104.1	101.5	106.2	101.2	106.2

The above Table shows the variation of the proportions of the sexes in the different quarters, and months even, in the different years, and seems to conclusively determine that season has very little, if any, influence in the causation of sex.

PARENTAGE.

By reference to Table I, page 4, in the division of births there will be found the parentage of the children born in Rhode Island during the year 1892. It will be seen that of the whole number, 9,270, there were 3,123 of native parentage, 4,396 foreign, and 1,751 of mixed parentage.

By mixed parentage is meant the children born of native fathers and foreign mothers, and of foreign fathers and native mothers.

Of native fathers and foreign mothers there were 875, and of foreign fathers and native mothers, 876.

The following Table will show the number and parentage of the children born in the State, and the variations of the same from year to year, in each of the last three years; and also the number and variations occurring in two periods of five years each, and two of ten years each, from 1858 to 1887, inclusive:

TABLE XXII.

PARENTAGE.	1892.	1891.	1890.	5 years, 1883 to 1887.	5 years, 1878 to 1882.	10 years, 1868 to 1877.	10 years, 1858 to 1867.
Native father and mother	3,123	3,319	4,021	15,001	14,169	25,625	20,321
Foreign father and mother	4,396	4,293	3,041	15,245	13,562	26,356	19,665
Native father, foreign mother	875	895	789	3,014	2.327	3,135	1,690
Foreign father, native mother	876	919	696	3,378	2,887	4,077	1.696
Parentage not stated	....	....	....	....	....	....	293
Total	9,270	9,426	8,550	36,668	31,945	59,213	43,665

The following Table of *percentages* will show, in a different and perhaps clearer way, the same changes that have occurred in the proportions of the births in the different classes of parentage during the last three years; and during thirty years, from 1858 to 1887, inclusive, in two periods of five years each and two of ten years:

TABLE XXIII.

PARENTAGE.	1892.	1891.	1890.	5 years, 1883 to 1887.	5 years, 1878 to 1882.	10 years, 1868 to 1877.	10 years, 1858 to 1867.
Native father and mother	33 69	35.20	47 02	40 91	43.03	43 36	46.84
Foreign father and mother	47 12	45.50	35.60	41.58	41.23	44.53	45.36
Native father, foreign mother	9 41	9 60	9 22	8.30	6.95	5.37	3.89
Foreign father, native mother..	9.15	9.70	8.16	9.21	8.79	6.71	3.91
Total	100.00	100 00	100.00	100 00	100 00	100.00	100 00

The registration of births, in 1892, is of interest as continuing to show as usual a smaller proportion of children born of native fathers than of foreign fathers. A considerable number of those recorded as native fathers were children of foreign parentage.

The percentage of children of mixed parentage was rather smaller, in 1892, than in the previous year.

The following Table will present the percentages of children of native and of foreign-born fathers, and of native and foreign-born mothers, respectively, in each of the last three years, and in each of two periods of five years each and two of ten years each, from 1858 to 1887, inclusive:

TABLE XXIV.

CHILDREN WITH	1892.	1891.	1890.	5 years, 1883 to 1887.	5 years, 1878 to 1882.	10 years, 1868 to 1877.	10 years, 1858 to 1867.
Native fathers.	43 13	44 80	56.30	49.21	50.08	48.73	50.73
Foreign fathers	56 87	55 20	43 70	51 79	49.92	51.27	49.26
Native mothers	43 14	44 90	55 20	49.91	51.79	50.10	50 75
Foreign mothers........................	56.86	55.10	44 80	50.09	48 21	49 90	49 25

The percentage of the children born of foreign fathers and of foreign mothers, during 1892, will also be noticed as being very considerably larger than in any previous year.

The number of native fathers of children born in 1892, was 1,274 less than the number of foreign fathers, and the number of native mothers was 1,272 less than of foreign.

BIRTHS OF COLORED CHILDREN.

The number of births of children of colored parentage reported for the year 1892 is 182. This number is 1 less than that of 1890, and 9 more than in 1891.

In regard to sex, the numbers and proportions were as follows, viz.: Males, 94, females, 88; or 106 8 males to each 100 females.

The following summary will show the changes that have occurred from year to year, in the proportions of the sexes of colored children born in Rhode Island, during the last seventeen years:

Years.	Whole Number.	Males.	Females.	Males to each 100 females.
1876–1885	1,762	849	913	93 0
1886	212	117	95	123.0
1887	211	111	100	111.0
1888	202	109	93	117 2
1889	194	87	107	81.3
1890	183	89	94	94.6
1891	173	86	87	98.9
1892	182	94	88	106 8

The following Table will show the location, number, sex, etc., of colored births during 1892:

TABLE XXV.

Showing Number, Sex, etc., of Colored Births, 1892.

TOWNS AND CITIES.	Whole Number	Males.	Females.	COUNTIES.
Barrington	1	1	....	Bristol County 1
Coventry	1	1	....	
East Greenwich	7	3	4	Kent County.......... 8
Middletown	1	....	1	
New Shoreham	1	....	1	
NEWPORT CITY	28	16	12	Newport County 30
East Providence	3	....	3	
Lincoln	1	....	1	
PROVIDENCE CITY	117	65	52	Providence County 121
Charlestown	1	1	....	
Exeter	5	2	3	
Hopkinton	1	1	....	
Narragansett District	1	....	1	
North Kingstown	2	1	1	
South Kingstown	9	1	8	
Richmond	2	2	....	
Westerly	1	....	1	Washington County.. 22
WHOLE STATE	182	94	88	182

NUMBER OF CHILD OF THE MOTHER.

In the following Table will be found the number of the child of the mother born during 1892; that is, how many of the children born were reported as the first, second or third child, etc., of their respective mothers. The statistics on this subject begin with the year 1857, and the following Table includes the children reported during the last six years, and also the total for thirty-six years, 1857 to 1892, inclusive:

TABLE XXVI.

NUMBER OF THE CHILD OF THE MOTHER.	1887.	1888.	1889.	1890.	1891.	1892.	36 years, 1857-1872.
First	1,853	1,998	2,082	2,103	2,345	2,383	53,260
Second	1,483	1,545	1,545	1,816	1,899	1,754	42,983
Third	1,146	1,182	1,209	1,253	1,380	1,444	33,361
Fourth	918	884	923	924	1,055	1,050	25,143
Fifth	585	609	725	699	782	754	18,787
Sixth	475	475	503	515	594	520	13,786
Seventh	375	329	370	364	392	416	9,869
Eighth	289	281	278	294	297	311	7,074
Ninth	198	185	207	187	234	218	4,750
Tenth	143	141	162	156	169	149	3,198
Eleventh	78	83	96	89	114	113	1,918
Twelfth	65	50	47	61	71	75	1,219
Thirteenth	32	38	29	46	40	36	680
Fourteenth	15	21	23	22	26	18	343
Fifteenth	6	9	12	11	17	13	190
Sixteenth	3	4	2	4	6	10	92
Seventeenth	3	2	3	2	0	4	56
Eighteenth	0	3	3	2	2	1	25
Nineteenth	0	1	1	2	2	1	13
Twentieth	1	0	0	0	1	0	6
Twenty-first	0	0	0	0	0	0	3
Twenty-second	0	0	0	0	0	0	2
Total	7,668	7,840	8,220	8,550	9,426	9,270	216,758

There was a decrease of 156 in the whole number of births in 1892, from the number in 1891.

In the class of the first child of the mother, the increase was little more than 1 per cent., while in the class of second child of the mother the decrease was more than 7 per cent.

In the class of third child of the mother the increase was over 4½ per cent.

There are varying differences in the proportions of all classes in the different years.

There was one return of birth in each of eighteenth and nineteenth classes.

The proportion of each class to the whole number will be shown by the following Table, which gives the percentage of the children born in each of the last four years, who were respectively the first, second, third, etc., children of the mothers, and which will also give the average percentage of each class of births, during a period of ten years, from 1868 to 1877 inclusive, and of five years, 1878 to 1882, and from 1883 to 1887, inclusive:

TABLE XXVII.

NUMBER OF THE	1892.	1891.	1890.	1889.	5 years, 1883 to 1887.	5 years, 1878 to 1882.	5 years, 1868 to 1877.
First	25.70	24.88	24.59	25.33	24.30	23.1	25.2
Second	18.92	20.15	21.25	18.80	19.22	18.7	20.7
Third	15.58	14 67	14 65	14.70	14.82	16 9	15.5
Fourth	11.33	11.19	10.45	11.23	11.05	12.2	11.4
Fifth	8.13	8.29	8.17	8.82	8.56	9.1	8.4
First to Fifth	79 66	79.18	79.11	78.88	77.80	80.0	81.1
Sixth and over	20.34	20.82	20.89	21.12	22 20	20.0	18.9
Total	100.00	100 00	100.00	100 00	100 00	100.0	100.0

PLURALITY BIRTHS.

The general statistics in relation to plural births, in Rhode Island, may be found on page 8, in Table III.

There were eighty-four cases during the year, all of which were twins, thus making the number of one hundred and sixty-eight children.

Of the 168 children of plural birth, 92 were males, and 76 were females.

The cases occurred in the different divisions of the State as follows: Bristol county, 0; Kent county, 4; Newport county towns, 2; Newport city, 4; Providence county towns, 24*; Providence city, 44; Washington county, 6.

The following exhibit will show the parentage of children of plural birth in Rhode Island, in 1892, and number of each:

---

* Including Pawtucket and Woonsocket.

Parents, both native Americans	25
" " born in Ireland	9
" " " England	2
" " " Portugal	1
" " " Norway	2
" " " France	8
" " " Italy	4
" " " Scotland	2
" " " Western Islands	4
" " " Sweden	3
" " " Russia	2
" " " Denmark	1
Swiss father and Scotch mother	1
Native father and English mother	3
Native father and Irish mother	3
English father and native mother	2
English father and Welch mother	1
Irish father and native mother	7
French father and native mother	1
German father and native mother	2
Irish father and English mother	1
Total births	84
Total children	168

The months in which the plurality births occurred were as follows:

January	20	April	8	July	12	October	16
February	8	May	14	August	10	November	14
March	16	June	16	September	20	December	14
First Quarter	44	Second Quarter	38	Third Quarter	42	Fourth Quarter	44

First half of year.................82   Second half of year.................86

Total.................................168

The general statistics of births, and number of *cases* reported in Rhode Island during a period of thirty-nine years, that is, from 1854 to 1892, inclusive, are as follows:

223,210 cases of single births	giving	223,210 children.
2,385 cases of twin births	giving	4,770 children.
22 cases of triple births	giving	66 children.
1 case of quadruple births	giving	4 children.

Of the whole number of *cases* of child-birth (225,618) during the thirty-nine years, one in 94.6 produced twins, one in 10,255 produced triplets, and one in 225,618 produced quadruplets.

Of the whole number of children born during the same period, (228,050), ascertained from the reports, one in every 48 was a twin, and one in every 3,315 was a triplet.

Of the 2,408 *cases* of plurality birth which have occurred in the State during the last thirty-nine years, there were 967 cases in which both parents were natives; 1,135 cases in which both parents were foreign; 298 cases in which the parentage was mixed, that is, one native and one foreign parent; and 8 in which the parentage was not stated.

The whole number of children born in plurality cases, during the thirty-nine years, was 4,840, of whom 2,465 were males, and 2,371 were females; the sex of the remaining four was not given.

STILL-BORN.

The whole number of still-born children reported in Rhode Island, for the year 1892, was 371; this number is 99 more than for the year 1891.

The following are the numbers reported from the different divisions of the State:

Bristol County	7
Kent County	17
Newport County Towns	5
Newport City	27
Providence County Towns	72
Pawtucket City	31
Providence City	190
Woonsocket	17
Washington County	5
Whole State	371

The following Table will give the number in each town from which still-births were reported; with the sex, parentage and color:

Table XXVIII.

Still-Born, 1892, Locality, Number, Sex, Parentage and Color.

TOWNS AND DIVISIONS OF THE STATE.	Total.	SEX.		PARENTAGE.		COLOR.	
		Males.	Females.	Native.	Foreign.	White.	Colored.
Bristol	5	2	3	.....	5	5	.....
Warren	2	2	.....	2	.....	2	.....
Bristol County	7	4	3	7	5	7	.....
Coventry	4	2	2	4	.....	4	.....
East Greenwich	3	2	1	2	1	2	1
Warwick	10	7	3	6	4	10	.....
Kent County	17	11	6	12	5	16	1
Middletown	1	1	.....	1	.....	1	.....
Newport City	27	19	8	14	13	24	3
New Shoreham	2	2	.....	2	.....	2	.....
Portsmouth	1	1	.....	1	.....	1	.....
Tiverton	1	1	.....	1	.....	1	.....
Newport County	32	24	8	19	13	29	3
Cranston	4	3	1	2	2	4	.....
Cumberland	6	6	.....	2	4	6	.....
East Providence	7	3	4	2	5	7	.....
Johnston	10	5	5	2	8	10	.....
Lincoln	37	18	19	12	25	37	.....
North Providence	2	1	1	.....	2	2	.....
North Smithfield	1	1	.....	.....	1	1	.....
Pawtucket	31	14	17	19	12	31	.....
Providence City	190	113	77	85	105	185	5
Scituate	4	2	2	4	.....	4	.....
Smithfield	1	.....	1	.....	1	1	.....
Woonsocket	17	9	8	4	13	17	.....
Providence County	310	175	135	132	178	305	5
North Kingstown	3	3	.....	.....	3	3	.....
South Kingstown	1	.....	1	1	.....	1	.....
Westerly	1	.....	1	1	.....	1	.....
Washington County	5	3	2	2	3	5	.....
Total	371	217	154	167	204	362	9

SUMMARY OF SEX OF STILL-BORN.

The following Table shows the number and sex of the still-born children whose births were reported in Rhode Island during each of the last five years, and also of a period of thirty-nine years, extending from January 1, 1854, to December 31, 1892:

TABLE XXIX.

SEX.	1892.	1891.	1890.	1889.	1888.	January 1, 1854, to Dec. 31, 1892.
Males	217	158	184	186	164	5,059
Females	154	114	112	143	131	3,571
Total	371	272	296	329	295	8,630

The average proportions of the sexes of the still-born, for the period of thirty-nine years, were as follows: In every 100 still-births there were about 59 males and 41 females.

Season of Still-Births.—During 1892, and also the thirty-two years from January 1, 1854, to December 31, 1885, the proportions in relation to season, by percentage, were as follows:

	1892.	32 years.		1892.	32 years.
First Quarter	23.7	24.82	Third Quarter	23.7	26.82
Second Quarter	25.1	23.16	Fourth Quarter	27.5	25.20
Per cent. first half of the year	48.8	47.98	Last half of the year	51.2	52.02

The births of the still-born in the different months of the year, although somewhat variable in number, do not, as a rule, show great discrepancies.

PARENTAGE OF THE STILL-BORN.

Of the 371 still-born children reported in 1892, there were 167 of native, and 204 of foreign parentage, reckoned by the nativity of the fathers, that is, the father's name given; and 166 of native and 205 of foreign, reckoned by the nativity of the mothers, name of father given or not given.

ILLEGITIMATES.

In the following Table will be found the whole number of illegitimate births returned during 1892, with the sex, color, parentage and locality of birth :

TABLE XXX.

Illegitimates, 1892.

TOWNS.	Whole Number.	SEX.		COLOR.		PARENTAGE.		Almshouses and Penal Institutions.
		Males.	Females.	White.	Black.	Native.	Foreign.	
Bristol	1	.....	1	1	.....	1	......	.....
Coventry	1	.....	1	1	.....	1	......	.....
East Greenwich	2	1	1	2	.....	2	......	......
Little Compton	1	......	1	1	.....	1	......	......
Newport City	1	1	.....	1	......	1	......	1
Tiverton	3	2	1	3	.....	3	......	......
Cranston	7	4	3	7	......	3	4	7
Glocester	1	1	.....	1	.....	1	.....	.....
Johnston	1	1	......	1	.....	.....	1	......
Pawtucket	2	1	1	2	......	2	......	.....
Providence City	68	29	39	54	14	46	22	37
Woonsocket	3	2	1	3	......	3	.....	......
Exeter	1	.....	1	......	1	1	......	......
South Kingstown	2	.....	2	2	......	2	.....	......
Richmond	1	.....	1	1	.....	1	.....	......
Whole State	95	42	53	80	15	68	27	45

There were returns, during 1892, of 95 children of illegitimate parentage. The number is one more than that of the previous year.

Sex.—Of the 95 there were 42 males and 53 females.

Color.—Of the 95 illegitimates born during 1892, 80, or 84.2 per cent. were white, and 15, or 15.8 per cent. were colored.

Parentage.—Of the 95, 68, or 71.6 per cent. of all were born of native mothers, and 27, or 28.4 per cent. of foreign born mothers.

Forty-one, or 43.1 per cent. were born in Rhode Island. The colored illegitimates were, with two exceptions, of native parentage. There were of the 80 white illegitimates, 63 born of native mothers, and 17 of foreign mothers.

The ages of the mothers were as follows:

Age.	No of Mothers.	Age.	No. of Mothers.	Age.	No of Mothers.
14	1	21	9	28	2
15	1	22	5	30	4
16	4	23	6	34	2
17	6	24	2	35	1
18	8	25	4	36	1
19	9	26	3	38	1
20	5	27	1	Not given	20
Total					95

Number of Child of Mother.—In 71 cases this was reported as the first child of the mother, in 11 cases the second child, in 4 cases the third, in 3 cases the fourth, in 1 case the fifth, in 2 cases the sixth, in 1 case the seventh and in 2 cases the eighth child.

Forty-five of the illegitimates were born of indigent, pauper or criminal mothers, in public, charitable or penal institutions.

Thirty-six of these births occurred at the Lying-In Hospital in the city of Providence.

The proportion of illegitimates to the whole number of births was about one in every 100 cases, or about ten in every 1,000 births.

MARRIAGES, 1892.

The number of marriages registered in Rhode Island, during the year 1892, was 3,502. This number is 307 more than in 1890, and 182 more than in 1891.

The general statistics of marriage in 1892, in relation to season and number, in the different divisions of the State, may be found in Table IV, on the ninth page.

The statisties in relation to the proportion to population of persons married in 1892, in each of the towns and general divisions of the State, may be found in Tables XV and XVI, on pages 102 and 105.

The following Table will present the number of marriages, and the ratio of marriage to population, in each year for a period of thirty-three years, 1860 to 1892, inclusive:

TABLE XXXI.

YEARS.	Number Marriages.	Of Population, one Person Married in every	Persons Married per 1,000 of Population.	YEARS.	Number Marriages.	Of Population, one Person Married in every	Persons Married per 1,000 of Population.
1860.......	1,748	50.0	20.0	1878.......	2.324	55.7	17.9
1861.......	1,533	56.8	17.6	1879.......	2.396	57.8	17.5
1862.......	1,450	61.1	15.1	1880.......	2,769	49.9	20.0
1863.......	1,618	54.7	18.3	1881.......	2,750	50.3	19.9
1864.......	1,844	50.1	19.9	1882.......	2,634	52.5	19.0
1865.......	1,896	48.7	20.5	1883......	2.611	54.4	18.3
1866.......	2,318	39.9	25.1	1884.......	2,558	58.1	17.2
1867.......	2,344	39.8	25.1	1885.......	2.488	61.3	16.3
1868.......	2,285	40.5	24.8	1886.......	2,750	56.5	17.7
1869.......	2,289	47.5	21.1	1887.......	2.839	55.8	18.0
1870.......	2,362	46.0	21.7	1888.......	3,022	53.5	18.7
1871.......	2,336	46.5	21.5	1889.......	3,029	57.8	17.3
1872......	2,537	42.9	23.2	1890.......	3,195	54.1	18.4
1873.......	2,630	41.3	24.2	1891.......	3,320	53.5	18.5
1874.......	2,541	50.8	19.6	1892.......	3,502	52.4	19.1
1875.......	2,485	52.0	19.2				
1876.......	2,253	57.3	17.5	Annual Average ...		51.6	19.5
1877.......	2,282	56.6	17.7				

SEASON.

The following Table will show the number and percentage of marriages in Rhode Island, in each month and each quarter of the year 1892, together with the aggregate number and percentage in each quarter for thirty-five years, viz., from 1854 to 1888, inclusive:

TABLE XXXII.

MONTHS.	Number of marriages each month, 1892.	Number of Marriages each Quarter, 1892.	Percentage of each Quarter to total Marriages, 1892.	Number of Marriages per Quarter, 35 yrs., 1854–1888.	Percentage each Quarter, 35 years.
January	275	1st Quarter.. 744	21.24	1st Quarter...16,852	22.03
February	289				
March	180				
April	268	2d Quarter .. 956	27.30	2d Quarter ...19,025	24.88
May	259				
June	429				
July	218	3d Quarter .. 784	22.39	3d Quarter ...17,897	23.39
August	246				
September	320				
October	408	4th Quarter..1,018	29.07	4th Quarter ..22,691	29.70
November	382				
December	228				
Total		3,502	100.00	*76,485	100.00

The largest number of marriages, in any one month, during 1892, occurred in the month of June. For thirty-six years past the greatest number of marriages has been in the month of November.

There was an agreement with the rule in the proportions of the number of marriages, in the different quarters of the year, to the whole number during the year. The rule has been as follows: The largest proportion in the last quarter; the next largest in the second quarter; followed by the third quarter; and, finally, the first quarter having the smallest proportion of any.

During 1892 the proportions in the different quarters, from the largest to the smallest, were as follows: Last quarter, 29.07 per cent.; second quarter, 27.30 per cent.; third quarter, 22.39 per cent.; first quarter, 21.24 per cent.

NATIVITY OF PERSONS MARRIED.

The following Table shows the *number* of marriages, according to the nativities of the parties, for each of the last five years, and also for the aggregate of five years, from 1883 to 1887, inclusive, and of twenty-five years, from 1858 to 1892, inclusive:

---

* Including 20, date not given, recorded previous to 1860.

Table XXXIII.

BIRTH PLACE.	1892.	1891.	1890.	1889.	1888.	5 years. 1883 1887 Total.	25 years, 1858-1882. Total.
United States	1,672	1,551	1,555	1,539	1,496	7,157	33,553
Foreign countries	1,100	1,079	951	908	935	3,601	13.753
Native groom, foreign bride	313	316	345	271	329	1,323	3,488
Foreign groom, native bride	387	341	341	308	262	1,165	3,876
Not stated	.....	.....	.....	.....	.....	....	64
Total	3,502	3,320	3,195	3,029	3,022	13,246	54,731

It will be understood that in the above enumeration the *parent nativity* of the persons married is not considered, but the country where born.

Parties born in the United States, although children of foreign born parents, are reckoned as natives.

In the following Table are given the *percentages* by birth, of native, foreign and mixed marriages, in each of the last five years and in the aggregate of five years, 1883 to 1887, inclusive, and of twenty-five years, 1858 to 1882, inclusive:

Table XXXIV.

BIRTH-PLACE.	1892.	1891.	1890.	1889.	1888.	5 years, 1883-1887.	25 years, 1858-1882
United States	47.74	16.72	48.67	50.88	49.50	51.02	61.30
Foreign countries	31.41	32.50	29.76	33.28	30.91	27.19	25.13
Mixed nativity	20.85	20.78	21.57	15.84	19.56	18.79	13.57
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

It will be of some interest to notice that by the exhibit of the two preceding Tables, it is shown that, although the marriages of the native born (whether the issue of foreign born parents or natives) have, as a rule, *increased in numbers*, they have also steadily *decreased in proportion*, with two or three exceptional years, that is, to the whole number of marriages; while the marriages of the class of the exclusively foreign born, have been, for thirty years preceding 1892, gradually increasing in proportion.

The falling off of the percentage of marriages of the class of exclusive foreign born, during 1890, was only a temporary interruption.

AGES OF THE MARRIED.

In the following Table the varying ages of persons married during 1892, are presented:

TABLE XXXV.

AGES OF GROOMS.	AGES OF BRIDES.												Number of Grooms.
	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65	65 to 70.	Not stated.	
Under 20	49	28	3	1	..	..	..	..	..	..	..	..	81
20 to 25	383	866	134	19	3	..	..	..	..	..	..	..	1,405
25 to 30	119	503	338	48	13	3	..	..	..	..	..	2	1,026
30 to 35	24	127	147	108	19	3	1	..	..	..	..	..	429
35 to 40	7	53	52	60	47	12	3	..	..	..	..	2	236
40 to 45	4	19	22	37	26	12	7	2	..	..	..	..	129
45 to 50	1	7	6	16	19	20	11	5	..	..	..	..	85
50 to 55	...	1	...	7	11	10	7	4	..	1	..	..	41
55 to 60	...	2	1	5	7	4	1	3	1	1	..	..	25
60 to 65	...	...	...	2	5	3	5	1	5	2	1	..	24
65 to 70	...	...	...	...	3	3	1	2	3	1	..	..	13
70 to 75	...	...	...	...	..	1	..	2	..	1	..	..	4
75 to 80	...	...	...	...	...	1	1	..	1	..	..	..	3
Not stated	...	...	...	..	...	..	..	..	..	..	..	1	1
Number of Brides	587	1,606	703	303	153	72	37	19	10	6	1	5	3,502

The extreme discrepancies in the ages of some couples married in 1892 were not so frequent as in some previous years.

The same results, in 1892, in relation to numbers in the different age periods, may be presented in a different and perhaps clearer way as follows:

TABLE XXXVI.

1892.	Under 20.	20 to 25,	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	Not stated.
Males	81	1,405	1,026	429	236	129	85	41	25	24	13	4	3	1
Females	587	1,606	703	303	153	72	37	19	10	6	1	..	...	5
Total persons	668	3,011	1,729	732	389	201	122	60	35	30	14	4	3	6

The whole number of persons in each division of ages, of both sexes, married in Rhode Island in each of the last twenty-seven years, that is, from 1866 to 1892, inclusive, is presented in the following Table:

Table XXXVII.

YEARS.	Under 20.	20 to 25.	25 to 30.	30 to 35.	35 to 40.	40 to 45.	45 to 50.	50 to 55.	55 to 60.	60 to 65.	65 to 70.	70 to 75.	75 to 80.	80 to 85.	85 to 90.	Not stated.
1866	693	1,931	1,025	419	213	127	81	59	25	21	12	1	...	....	...	23
1867	696	1,886	1,104	416	211	148	91	48	37	18	18	5	3	1	....	9
1868	644	1,835	1.050	432	219	133	82	61	30	29	11	8	4	....	....	32
1869	642	1,814	1,051	468	227	134	79	46	35	15	11	2	3	2	...	49
1870	744	1,883	1,084	415	216	159	86	64	26	21	12	3	2	....	....	6
1871	697	1,914	1,118	392	228	115	73	56	35	22	6	7	3	..	....	6
1872	786	2.073	1,182	434	237	131	81	61	43	21	13	6	1	...	...	5
1873	762	2,177	1,156	507	253	140	87	68	35	24	12	6	6	....	....	27
1874	770	1,992	1,179	459	268	159	101	52	36	39	8	9	1	...	...	9
1875	681	2,058	1,108	475	252	150	101	60	32	29	13	4	1	....	...	6
1876	691	1,741	1,041	450	224	154	80	53	27	19	12	1	2	....	...	9
1877	631	1,745	1,118	459	244	125	92	52	46	14	15	11	2	1	....	9
1878	618	1,832	1,123	441	259	162	74	49	39	20	17	2	4	....	....	8
1879	629	1,879	1.156	481	272	123	78	56	39	26	18	9	2	2	1	11
1880	688	2,301	1,262	556	329	163	91	65	33	27	15	3	3	1	...	1
1881	599	2,208	1,410	547	298	187	107	54	34	31	16	5	1	1	...	2
1882	498	2,125	1,377	563	301	161	102	57	36	27	11	5	3	2	...	....
1883	497	2,108	1,370	486	319	183	115	73	31	20	14	3	2	1	..	....
1884	484	2,027	1,289	569	307	152	114	64	48	30	23	6	3	....	...	....
1885	438	1,973	1,296	540	309	163	102	57	45	27	13	7	3	....	1	2
1886	505	2,133	1,552	603	283	174	103	73	24	26	18	5	1	...	...	...
1887	501	2,308	1,552	607	294	162	114	49	39	23	19	7	3	....	....	....
1888	582	2,427	1,608	640	330	207	105	60	36	17	23	7	2	...	....	....
1889	543	2,463	1,492	712	379	182	121	66	45	8	16	9	....	2	...	....
1890	596	2,693	1,632	673	320	206	102	69	41	29	20	7	2	....	..	....
1891	685	3,141	1,442	635	315	158	115	64	35	21	17	6	1	1	...	4
1892	668	3,011	1,729	732	389	201	122	60	35	30	14	4	3	...	...	6

The following summary will show the number of persons married, the number of persons married under twenty years of age, and the percentages of marriages of persons under twenty years of age, during four periods of five years each, that is, from 1870 to 1889, inclusive, and during the years 1889, 1890, 1891 and 1892:

	Number of persons married.	Number married under twenty years of age.	Percentage of persons married under twenty years of age.
1870 to 1874	24,812	3,759	15.2
1875 to 1879	23,480	3,260	13.9
1880 to 1884	26,644	2,766	10.4
1885 to 1889	28,256	2,569	9.1
1889	6,058	543	8.9
1890	6,390	596	9.3
1891	6,640	687	10 3
1892	7,004	668	9.5

In the following Table will be found the number and proportion of the persons married under 20 years of age, of both sexes, in seven periods of five years each, from 1854 to 1888, inclusive; for the whole period of thirty-five years, and in 1889, 1890, 1891 and 1892:

TABLE XXXVIII.

5-YEAR PERIODS.	Total number of persons married	Persons married under 20.	Percentage under 20.
1854-1858	13,842	1,932	13.95
1859-1863	16,042	2,500	15.58
1864-1868	21,374	3,049	14.26
1869-1873	24,308	3,631	14.93
1874-1878	23,770	3,391	13.84
1879-1883	26,320	2,921	11.09
1884-1888	27,314	2,510	9.19
35 years, 1854-1888	152,970	19,934	13 03
1889	6,058	543	8.09
1890	6,390	596	9.32
1891	6,640	687	10.34
1892	7,004	668	9.54

Per cent., first fifteen years	14.60
Per cent., second fifteen years	13.28
Per cent., last four years	9.32

PROPORTION OF SEX.

Table exhibiting the percentages of GROOMS in each division of ages, in each of the last thirty-three years:

TABLE XXXIX.

	YEARS.	Under 20.	20 to 25.	25 to 30.	30 to 40.	40 to 50.	50 and over	Total.
GROOMS.	1860	5.0	42.8	26.9	16.3	5.7	3.3	100.0
	1861	4.6	44.5	25.4	15.5	5.8	4.2	100.0
	1862	4.2	37.8	27.9	18.3	5.9	5.9	100.0
	1863	3.5	38.0	29.6	17.2	5.8	5.9	100.0
	1864	4.3	38.8	27.3	17.9	7.4	4.3	100.0
	1865	3.5	37.0	28.1	18.9	7.5	4.7	100.0
	1866	5.3	40.9	27.0	16.4	6.3	4.1	100.0
	1867	4.3	40.1	27.9	16.8	6.8	4.1	100.0
	1868	4.1	39.9	28.2	17.1	6.1	4.6	100.0
	1869	4.3	39.6	27.7	18.5	6.1	3.8	100.0
	1870	4.8	40.4	28.1	16.0	6.4	4.3	100.0
	1871	5.3	40.1	28.9	16.5	4.9	4.3	100.0
	1872	4.3	41.3	28.2	16.6	5.2	4.4	100.0
	1873	3.8	42.4	26.7	17.0	6.0	4.1	100.0
	1874	4.1	40.4	27.2	17.5	6.4	4.4	100.0
	1875	3.5	40.9	27.8	17.6	6.1	4.2	100.0
	1876	5.1	37.5	28.6	17.9	5.6	4.3	100.0
	1877	4.3	36.0	30.2	18.7	5.9	6.9	100.0
	1878	3.9	38.5	29.0	18.0	6.3	4.3	100.0
	1879	3.9	37.8	28.8	19.3	5.4	4.8	100.0
	1880	3.6	38.9	27.5	19.9	5.8	4.3	100.0
	1881	2.8	37.2	29.7	19.5	6.8	4.0	100.0
	1882	2.2	36.0	31.4	20.0	6.1	4.3	100.0
	1883	2.9	36.2	31.7	17.7	7.2	4.3	100.0
	1884	2.5	36.2	29.1	21.0	6.2	5.0	100.0
	1885	2.6	34.7	30.2	20.9	6.8	4.8	100.0
	1886	2.5	35.2	31.9	19.6	6.8	4.0	100.0
	1887	1.7	37.1	31.6	19.6	6.2	3.8	100.0
	1888	2.8	36.1	31.1	19.8	6.5	3.7	100.0
	1889	2.3	37.6	27.8	21.3	6.6	4.4	100.0
	1890	3.3	36.9	30.8	18.9	6.1	4.0	100.0
	1891	3.2	44.7	26.4	17.2	5.2	3.3	100.0
	1892	2.3	40.1	29.3	19.0	6.1	3.2	100.0

Table exhibiting the percentages of BRIDES in each division of ages, in each of the last thirty-three years:

TABLE XL.

	YEARS.	Under 20.	20 to 25.	25 to 30.	30 to 40.	40 to 50.	50 and over.	Total.
BRIDES.	1860	25.8	44.1	17.0	9.1	2.6	1.4	100.0
	1861	29.6	42.0	15.2	7.8	4.1	1.3	100.0
	1862	24.9	41.3	16.7	11.8	4.1	1.2	100.0
	1863	24.9	42.6	16.9	9.8	4.1	1.7	100.0
	1864	24.2	43.4	17.8	10.3	2.9	1.4	100.0
	1865	22.6	43.3	19.1	11.0	3.5	1.5	100.0
	1866	24.7	42.9	17.4	11.0	2.7	1.3	100.0
	1867	25.4	40.5	19.3	10.0	3.4	1.4	100.0
	1868	24.4	40.9	18.1	11.6	3.3	1.7	100.0
	1869	24.1	40.5	18.7	12.1	3.4	1.2	100.0
	1870	26.8	39.4	17.9	10.8	3.9	1.2	100.0
	1871	24.6	41.9	19.1	10.1	3.1	1.2	100.0
	1872	26.7	40.5	18.4	9.9	2.2	1.3	100.0
	1873	25.3	40.8	17.5	12.0	2.7	1.7	100.0
	1874	26.3	38.1	19.3	11.1	3.9	1.3	100.0
	1875	23.9	42.1	16.8	11.8	4.0	1.4	100.0
	1876	25.6	39.8	17.6	12.0	3.7	1.3	100.0
	1877	23.4	40.4	18.8	12.1	3.6	1.7	100.0
	1878	22.7	40.4	19.3	12.2	3.8	1.6	100.0
	1879	22.8	40.7	19.4	12.1	3.0	2.0	100.0
	1880	21.1	44.2	18.0	12.0	3.3	1.4	100.0
	1881	19.0	43.0	21.5	11.2	3.8	1.5	100.0
	1882	16.7	44.8	20.9	12.6	3.9	1.1	100.0
	1883	16.2	44.2	20.6	13.2	4.3	1.5	100.0
	1884	16.4	43.0	21.3	13.2	4.2	1.9	100.0
	1885	14.9	44.6	21.8	13.2	3.8	1.7	100.0
	1886	15.8	42.4	24.5	12.5	3.3	1.5	100.0
	1887	15.9	44.1	22.8	12.1	3.5	1.6	100.0
	1888	16.4	44.3	22.1	12.4	3.7	1.1	100.0
	1889	15.1	43.7	21.5	14.7	3.4	1.6	100.0
	1890	15.4	47.3	20.4	12.0	3.6	1.3	100.0
	1891	17.4	49.9	17.0	11.4	3.1	1.2	100.0
	1892	16.8	45.9	20.1	13.0	3.1	1.1	100.0

It will be noticed, in the preceding Tables, that the proportions of persons married of both sexes, under twenty years of age, largely decreased during the last decade.

Of grooms, the proportion, compared with the first decade, has decreased about 38 per cent., and of females about 36 per cent.

The proportion of males married, between the ages of twenty and twenty-five, has decreased about 6 per cent., and has correspondingly increased in the more advanced age periods.

The proportion of females married, between twenty and twenty-five years of age, has not varied much, while of those between twenty-five and forty there has been an increase of proportion similar to that of males.

NUMBER OF TIMES MARRIED.

There will be found in the following Table the number of grooms and of brides who were married for the first, second, third, etc., time, in 1892:

TABLE XLI.

	First Marriage.	Second Marriage.	Third Marriage.	Fourth Marriage.	Fifth Marriage.	Sixth Marriage.	Total.
Grooms	3,027	438	36	....	1	....	3,502
Brides	3,115	373	13	1	....	....	3,502

The proportion of *grooms* married for the first time, in 1892, was 86.4 per cent. of the whole number, and the proportion of *brides* married for the first time was 88.9 per cent.

The following Table will show not only the number of times each of the parties were married, but also the number of bachelors and widowers who married spinsters, the number who married widows of first or second widowhood, etc., and of spinsters and widows who married bachelors, and widows of the second, third or fourth marriage, etc.:

TABLE XLII.

GROOMS.	BRIDES.					Total grooms.
	First.	Second.	Third.	Fourth.	Fifth.	
First marriage	2,834	190	3	....	....	3,027
Second marriage	265	164	8	1	....	438
Third marriage.	16	18	2	....	....	36
Fourth marriage.	....	....	....	....	....	....
Fifth marriage	....	1	....	....	....	1
Sixth marriage	....	....	....	....	....	....
Total Brides	3,115	373	13	1	....	3,502

It will be seen, by Table XLII, that 193 bachelors married widows, 3 of whom married brides that had been twice widowed. Of the 475 widowers who married in 1892, 281 married spinsters, and 193 married widows. Of the widows who married widowers, 10 had been twice married previously.

MARRIAGES OF PERSONS OF COLOR.

The number of marriages of persons of color in Rhode Island, in 1892, was 98. This includes four marriages in which one of the parties was white. The number and color of the individuals were, therefore, 192 persons of color and 4 persons white. The white persons were one male and three females. The marriages, however, may be properly included in the above class, inasmuch as the offspring of such marriages are persons of color.

The number reported during 1892 from the different towns was as follows, viz.:

Bristol	1
Coventry	1
East Greenwich	2
New Shoreham	3
Newport City	14
Lincoln	1
Pawtucket	4
Providence City	61
Scituate	1
Woonsocket	1

North Kingstown	1
South Kingstown	4
Richmond	1
Westerly	3
Total	98

MARRIAGES OF THE DIVORCED.

The following Table will give the towns from which returns of marriage with the facts of divorce were reported during 1892, the whole number of marriages of divorced persons, whether of one or both parties; also whether the second or third marriage of the divorced groom or bride; and number of remarriages of same persons:

TABLE XLIII.

TOWNS.	Number of Marriages.	Number of Divorced Persons Married.	Grooms.	Brides.	Second Marriage of Groom.	Third Marriage of Groom.	Second Marriage of Bride.	Third Marriage of Bride.	Re-marriages, Same Parties.
Providence City	106	116	43	73	35	8	71	2	......
Warwick	6	8	6	2	5	1	2	.....	......
North Providence	1	1	1	.....	...	1	.....	.....	......
Woonsocket	7	9	6	3	5	1	3	.....	.....
Hopkinton	1	1	1	.....	1	.....	.....	.....	......
Richmond	1	1	1	.....	1	.....	.....	.....	......
Westerly	1	1	1	.....	1	.....	.....	.....	......
Whole State	123	137	59	78	48	11	76	2	......

There were 123 marriages, in 1892, in which one or both of the parties had been divorced, and in 9 of which both parties had been divorced.

The proportion of the *number of marriages*, of which one or both of the parties had been divorced, to the whole number of marriages, was about one in every 33, or about 3 per cent.

But the proportion of divorced *persons* married during 1892, to the whole number of persons married in the same year, was about one in every 51, about 1.9 per cent., or 19 in every 1,000.

The number of divorced persons married, in 1892, was 28 more than in the previous year.

DIVORCES, 1892.

According to the returns made to the Secretary of the State Board of Health (State Registrar) by the clerks of the Supreme Courts of the different counties of Rhode Island, the number of applications for divorce, during 1892, was four hundred and twelve (412).

The number of divorces granted, during 1892, was two hundred and ninety-six (296).

There were fifty more applications, during 1892, than during the preceding year, and the number of divorces granted was 21 more.

Divorces are decreed for the following seven statute causes, viz.:

1. Adultery.

2. Extreme cruelty.

3. Wilful desertion for five years of either of the parties, or for a shorter period, in the discretion of the court.

4. Continued drunkenness.

5. Neglect or refusal to provide necessaries (having ability) for the subsistence of a wife.

6. Gross misbehavior and wickedness other than aforesaid.

7. Impotency.

Divorces are also decreed, or marriages set aside, in the discretion of the court, for ascertained affinity, consanguinity, idiocy, insanity, penitentiary crimes, and bigamous or otherwise illegal marriage.

The following Table shows the number of applications for divorce, and the number granted, in 1892, in each county of the State; also the causes alleged for the applications:

TABLE XLIV.

COUNTIES.	Number of Applications.	Number Granted.	CAUSES ALLEGED.								Total Causes Alleged.
			Adultery.	Extreme Cruelty.	Wilful Desertion.	Continued Drunkenness.	Neglect to Provide Necessaries, &c.	Other Gross Misbehavior.	Void Marriage.	Illegal Marriage.	
Bristol	5	2	2	2	1	3	3	4	......	......	15
Kent	31	19	4	3	11	1	......	......	......	......	19
Newport	27	20	6	8	10	5	15	8	......	......	52
Providence	318	236	52	89	155	75	202	34	3	......	610
Washington	31	19	12	13	19	7	21	11	......	......	83
Whole State	412	296	76	115	196	91	241	57	3	......	779

There were, during the year 1892, four hundred and twelve (412) applications for divorce, and the whole number of causes alleged was seven hundred and seventy-nine (779). There was, therefore, an average of rather less than two causes alleged in each application. That average is not far from the rule of many years.

The causes alleged why divorce should be granted, in the applications during 1892, were 96 more in number than in 1891.

In order to show the actual number of applications, and the number of divorces granted in each of the last twenty years, the following summary is presented:

	Applications for divorce.	Divorces granted.	Applications refused or continued or withdrawn.
1873	261	173	88
1874	276	242	34
1875	227	158	69
1876	254	196	58
1877	257	178	79
1878	258	196	58
1879	255	246	9
1880	317	273	74
1881	350	268	82
1882	339	271	68
1883	321	257	64
1884	320	266	54
1885	293	227	66
1886	336	257	70
1887	322	248	74
1888	304	224	80
1889	366	274	92
1890	327	244	83
1891	362	275	87
1892	412	296	116
20 years, total	6,187	4,769.	1,418

The average annual proportion of decrees of divorce granted during the last twenty years, to the applications therefor, was nearly 77.1 per cent.

During the last ten years the proportions were as follows:

Years	1883,	1884,	1885,	1886,	1887,	1888,	1889,	1890,	1891,	1892.
Per cent	80.0	83.0	78.5	76.5	77.0	73.6	74.8	74.6	76.0	71.8

It will be seen that the decrees have diminished somewhat in the ratio to the applications, during the last seven years.

The proportion of *divorces granted*, in 1892, to the whole number of marriages during the same year, was *one divorce* to every eleven and eight-tenths marriages.

The proportion of *applications for divorce* to whole number of marriages, during the year, was one *application* to every eight and five-tenths marriages.

The following Table shows the number of divorces granted in each county, and in the whole State, in each of the last twenty-four years, and the proportion of marriages to each divorce granted in each year:

TABLE XLV.

YEARS.	Bristol County.		Kent County.		Newport County.		Providence County.		Washington County.		Whole State.	
	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.	Divorces Granted.	Marriages to one Divorce.
1869	10	10.6	15	12.5	6	27.7	120	13.8	11	15.5	162	14.1
1870	3	22.7	18	11.8	6	26.3	152	11.3	21	9.3	200	11.8
1871	5	16.8	11	17.9	4	49.7	123	13.3	18	11.4	161	14.5
1872	8	10.2	13	15.7	8	22.9	149	12.6	22	8.9	200	12.7
1873	6	16.2	22	9.8	8	21.9	131	14.8	6	33.7	173	15.2
1874	10	8.9	20	8.0	6	29.0	190	10.0	16	11.6	242	10.5
1875	2	50.0	18	8.8	7	23.4	120	14.9	11	20.5	158	15.7
1876	6	14.5	15	12.8	7	20.5	148	11.1	20	8.8	190	11.5
1877	7	12.0	9	16.3	7	26.0	134	12.4	21	9.9	178	12.8
1878	4	26.0	11	13.3	13	12.8	156	10.9	12	17.3	196	11.9
1879	5	18.8	19	9.0	7	24.1	195	9.1	20	9.7	246	9.7
1880	8	12.1	23	9.4	11	17.6	208	9.7	23	17.0	273	10.1
1881	6	20.1	26	7.3	10	16.9	207	10.0	19	11.0	268	10.4
1882	6	15.0	18	10.3	15	13.0	221	8.9	11	16.2	271	9.7
1883	6	15.8	15	11.5	9	21.2	214	9.2	13	13.3	257	10.2
1884	4	16.7	20	8.0	12	15.7	209	9.3	21	8.2	266	9.6
1885	3	23.0	9	18.6	17	11.2	186	10.1	12	15.0	227	11.0
1886	5	16.0	17	11.0	15	12.3	194	10.9	26	7.3	257	10.7
1887	1	75.0	23	8.0	13	13.4	187	11.8	24	7.9	248	11.4
1888	5	15.8	14	13.5	4	46.0	188	12.5	13	16.5	224	13.5
1889	6	12.5	27	8.3	14	14.0	211	11.2	16	10.8	274	11.1
1890	4	27.5	19	12.1	1	232.0	196	12.3	24	8.8	244	13.0
1891	10	8.4	20	11.2	17	12.6	214	11.2	14	14.3	275	12.1
1892	2	49.5	19	12.4	20	11.6	236	11.6	19	10.4	296	11.8

The ratio of divorces granted in the entire State, during 1892, to the whole number of marriages during the same year, was one divorce to about every eleven and eight-tenths marriages, as previously stated.

During the ten years 1869 to 1878, inclusive, the ratio of divorce to number of marriages was one divorce to every thirteen; during the ten years 1879 to 1888, inclusive, the ratio was one divorce to every ten and six-tenths marriages.

The average of the last five years was one divorce to every twelve and three-tenths marriages.

During the twenty-four years 1869–1892, the average proportions of divorce to marriage, in the several counties and the State, have been as follows:

Bristol County	One divorce to every 21 6 marriages.
Kent County	One divorce to every 11.6 marriages.
Newport County	One divorce to every 30.1 marriages.
Providence County	One divorce to every 11.4 marriages.
Washington County.	One divorce to every 12 6 marriages.
Whole State	One divorce to every 11.9 marriages.

Table showing the Number of Marriages to every Decree of Divorce, in five of the New England States, during the sixteen years from 1877 to 1892, inclusive.

TABLE XLVI.

STATES.	1877.	1878.	1879.	1880.	1881.	1882.	1883.	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
Rhode Island	12.8	11.9	9.7	10.1	10.4	9.7	10.2	9.6	11.0	10.7	11.4	13.5	11.1	13.0	12.1	11.8
Massachusetts.	23.1	21.4	23.4	26.8	40.9	34.3	27.8	28.2	26.4	30.0	24.5	30.6	26.9	31.8	27.1	28.5
Connecticut.	10.1	10.7	13.4	13.9	11.6	12.8	12.1	14.9	13.3	14.2	14.9	13.8	10.7	13.2	13.7	13.2
Vermont	15 0	14.0	21.0	20.0	16.0	17.8	16.4	13.5	28.8	20.0	13.5	16.9	19.6	18.3	17.1	. . . .
New Hampshire	. . . .	. . . .	. . .	7.7	9.2	10.9	12.8	10.4	10.9	8.3	10.7	8 7	9.8	9.5	. . . .	. . . .

DEATHS, 1892.

The number of deaths registered in Rhode Island, during 1892, according to the returns made to the State Registrar, was seven thousand, three hundred and ninety-six (7,396).

This number is larger by 462 than that of the year 1890, and 776 larger than that of 1891.

The death rate (20.1 in every 1,000 living persons), was one and five-tenths larger than that of the previous year.

The following summary will show the death-rates per 1,000 for each of the last six census years, in comparison with the last five years:

1865.	1870.	1875.	1880.	1885.	1888.	1889.	1890.	1891.	1892.
18.4	14.9	16.7	17.5	17.7	20.4	19.0	20.7	18.6	20.1

Since 1876 the returns have been more complete than previously, and during the last seven years, few deaths have occurred in the State which were not reported.

On the following page will be found the death-rates, by counties, for thirty-three years:

TABLE XLVII.

Death-rates per 1,000 living, by counties, for thirty-three years, from 1860 to 1892, inclusive; also the average rate of each period of five years each, from 1860 to 1889, inclusive, for the whole State.

YEARS.	Bristol.	Kent.	Newport.	Providence.	Washington.	State.	STATE. ANNUAL AVERAGE OF FIVE-YEAR PERIODS, 1860–1889.
Five years, 1860–1864	16.8	15.4	18.1	17.4	12.1	16.5	16.5 per 1,000 living.
1865	22.8	16.1	17.5	19.2	14.2	18.4	16.5 per 1,000 living.
1866	19.2	14.2	17.3	16.6	11.4	16.1	
1867	17.0	15.1	15.0	16.4	10.9	15.6	
1868	15.7	13.7	14.7	17.0	10.0	15.7	
1869	17.9	16.7	13.2	16.0	12.8	15.6	
1870	15.5	13.5	14.1	15.5	12.0	14.9	17.2 per 1,000 living.
1871	16.3	17.5	12.2	15.9	12.3	15.4	
1872	21.1	16.1	14.5	21.2	14.7	19.1	
1873	18.4	13.8	19.0	22.0	15.1	20.2	
1874	14.7	13.2	10.8	17.7	13.7	16.3	
1875	14.9	14.9	13.5	17.5	15.5	16.7	16.6 per 1,000 living.
1876	14.7	11.7	13.5	16.8	15.9	15.9	
1877	18.2	13.1	12.4	18.7	12.8	17.2	
1878	17.5	14.2	13.7	18.3	13.0	17.2	
1879	13.2	15.1	14.8	17.2	11.1	16.2	
1880	19.2	14.9	14.5	18.5	12.7	17.5	18.0 per 1,000 living.
1881	17.9	16.5	15.7	19.3	11.9	18.1	
1882	16.5	15.3	17.2	19.7	11.0	18.4	
1883	17.7	14.6	17.7	20.8	9.8	19.1	
1884	17.7	17.1	14.5	17.8	12.6	16.9	
1885	16.3	16.4	14.5	18.5	14.0	17.7	19.1 per 1,000 living.
1886	19.2	17.5	15.0	19.2	15.0	18.8	
1887	18.2	15.5	15.1	21.1	15.5	19.9	
1888	21.3	18.4	18.0	21.0	16.0	20.4	
1889	17.6	20.1	14.7	19.2	14.6	19.0	
1890	22.1	17.6	16.5	22.1	13.5	20.7	
1891	20.5	18.0	20.6	18.6	12.6	18.6	
1892	20.0	20.7	20.1	20.2	15.2	20.1	

Annual average, thirty years, 1860–1889 .. 17.3 per 1,000 living.

SEX OF DECEDENTS.

Of the 7,396 persons whose deaths were returned, during the year 1892, 3,725 were males, and 3,671 were females; the ratio standing at 101.5 males to each 100 females, or about 503 males and 497 females in every 1,000 decedents.

The following Table will show the number and proportion of males and females among the *decedents* in Rhode Island, during the ten years 1853 to 1862, inclusive; also in each of the thirty years from 1863 to 1892, inclusive, and for the entire period of forty years:

TABLE XLVIII.

DEATHS.

	Males.	Females.	Males to every 100 females
10 years, 1853-1862	10,930	11,269	96.9
1863	1,621	1,586	102.2
1864	1,633	1,727	92.4
1865	1,686	1,719	98.1
1866	1,497	1,473	101.5
1867	1,142	1,447	99.7
1868	1,413	1,499	94.3
1869	1,696	1,686	100.6
1870	1,588	1,650	96.2
1871	1,621	1,723	94.1
1872	2,118	2,129	99.4
1873	2,166	2,237	95.5
1874	2,111	2,118	99.7
1875	2,108	2,209	95.4
1876	1,969	2,147	91.7
1877	2,132	2,318	92.0
1878	2,161	2,280	94.8
1879	2,183	2,289	95.4
1880	2,366	2,463	96.0
1881	2,367	2,559	96.8
1882	2,487	2,587	96.5
1883	2,627	2,655	99.0
1884	2,486	2,655	93.6
1885	2,607	2,782	93.7
1886	2,833	3,016	93.9
1887	3,177	3,163	100.4
1888	3,199	3,395	95.4
1889	3,093	3,166	97.7
1890	3,501	3,433	102.0
1891	3,311	3,279	101.9
1892	3,725	3,671	101.5
40 years	79,981	82,220	97.3

The following Table of *births*, during the same period of time as the preceding, will show by comparison the different proportions of the sexes in the two classes of events:

TABLE XLIX.

BIRTHS.

	Males.	Females.	Males to every 100 females.
10 years, 1853-62	88,377	17.260	106.4
1863	1,892	1,788	105.8
1864	1,949	1,942	100.3
1865	2,096	1,857	112.9
1866	2,546	2,356	108.0
1867	2,655	2,464	107.0
1868	2,745	2,627	104.5
1869	2,685	2,560	104.9
1870	2,679	2,536	105.6
1871	2,878	2,800	102.8
1872	3,085	3,058	100.9
1873	3,135	2,887	108.6
1874	3,311	3,155	104.9
1875	3,362	3,146	106.9
1876	3,291	3,038	108.3
1877	3,163	3,072	103.0
1878	3,402	3,312	102.7
1879	3,259	3,091	105.4
1880	3,241	3,054	106.1
1881	3,498	3,263	107.2
1882	3,509	3,316	105.8
1883	3,548	3,498	101.4
1884	3,713	3,592	103.4
1885	3,591	3,437	104.4
1886	3,897	3,724	104.6
1887	3,968	3,700	107.2
1888	4,023	3,817	105.4
1889	4,193	4,027	104.1
1890	4,351	4,199	103.2
1891	4,926	4,500	109.5
1892	4,765	4,505	109.3
40 years	117,733	113,581	103.7

SEASON AND MORTALITY.

The whole number of decedents, and the sex of the same, in each month of the year 1892, and in each division of the State, may be found in Table V, on the tenth and eleventh pages.

The influence of season upon mortality may be further illustrated by the following Table, which shows the number and percentage of deaths, compared with the whole number of deaths, in each quarter of each of the last five years, and in the aggregate for thirty-seven years, 1853 to 1889, inclusive:

TABLE L.

SEASONS.	1892.		1891.		1890.		1889.		1888.		1853-1889.	
	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.	Number.	Per cent.
January-March.	2,103	28.44	1.425	21.53	2,027	29.23	1,563	24.97	1,709	25.92	31,928	23.63
April-June.	1,624	21.96	1,504	22.72	1,517	20.99	1,426	22.78	1,496	22.69	28,792	21.31
July-September	2,160	29.20	1,870	28.25	1,952	28.15	1,870	29 87	1,911	28.99	39.087	29.01
Oct.-December.	1,509	20.40	1,821	27.50	1,438	21.63	1,400	22.38	1,478	22.40	35,288	26.05
Total...........	7,396	100.00	6,620	100.00	6,934	100 00	6,259	100.00	6,594	100 00	135,095	100.00

Comparing the percentages of 1892, with those of the thirty-seven years, we find the per cent. of the first quarter very much larger; the second quarter is but little larger; and the last quarter is 5.6 per cent. less than for the average of the thirty-seven years. The greatest mortality for any one season of any year is usually found in the third quarter, but in 1890, as will be seen in the above Table, owing in large measure to the epidemic of influenza, the first quarter had the largest mortality.

TABLE LI.

Showing the Months in the Order of Largest Mortality for Eight Years.

1892.		1891.		1890.		1889.		1888.		1887.		1886.		1885.	
1. January	926	December	783	January	881	August	667	August	772	July	651	August	644	July	587
2. July	812	August	727	August	715	July	645	July	646	August	647	July	589	August	518
3. August	739	July	579	July	691	September	558	January	615	September	589	March	515	March	499
4. September	609	September	564	March	581	March	547	March	582	December	554	September	512	January	492
5. February	595	October	532	February	565	February	530	September	543	October	520	October	512	April	483
6. March	582	May	530	April	546	April	495	October	536	November	519	January	488	September	470
7. May	561	November	506	September	546	January	486	April	526	March	517	April	460	February	442
8. April	559	April	505	May	519	October	481	February	512	April	517	December	454	December	404
9. December	528	March	503	October	516	May	470	May	509	January	490	November	428	May	397
10. June	504	June	469	December	486	December	470	December	500	May	457	May	420	October	376
11. November	491	January	468	June	452	June	461	June	461	February	441	June	417	November	364
12. October	490	February	454	November	436	November	446	November	442	June	438	February	410	June	357
	7,396		6,620		6,934		6,259		6,594		6,340		5,849		5,389

PARENTAGE OF DECEDENTS.

There may be found in Table I, on pages 2–5, the number of decedents, in 1892, of the two general classes of parentage, that is, native and foreign.

Of the whole number of decedents, 7,396, reported in 1892, 3,216 were of native, and 4,180 were of foreign parentage.

By the term "foreign parentage" is meant the decedents whose fathers were born in some other country and not in the United States. The grandchildren of the foreign born are reckoned as of native parentage, if their fathers were born in the United States.

The following ten towns reported a larger number of decedents of foreign parentage than of native, namely: Warren, Warwick, Burrillville, Cumberland, Johnston, Lincoln, North Providence, North Smithfield, Pawtucket, Providence, and Woonsocket; also the State Institutions at Cranston.

These numbers varied from a moderate excess to three or four times as many of foreign as of native parentage.

The following Table gives the number and proportion in every one thousand deaths of decedents of native and of foreign parentage, in each of the last five years; and in the aggregate for thirty years, or from 1858 to 1887, inclusive:

Table LII.

PARENTAGE.	1892.		1891.		1890.		1889.		1888.		30 years, 1858–1887.	
	Number.	Per 1,000.	Number.	Per 1,000.	Number.	Per 1,000.	Number.	Per 1,000.	Number.	Per 1,000.	Number.	Per 1,000.
Native....	3,216	434.8	2,928	442.3	3,010	434.1	2,806	448.3	3,043	461.5	73,335	539.4
Foreign........	4,180	565.2	3,692	557.7	3,924	565.9	3,453	551.7	3,551	538.5	62,619	460.6
Total	7,396	1000 0	6,620	1000.0	6,934	1000 0	6,259	1000 0	6,594	1000 0	135,954	1000 0

AGE OF DECEDENTS.

In Table I, on pages 2–5, may be found the aggregate and average age of all the decedents whose deaths occurred in 1892, and with the age of each sex, in each town and county in the State.

By that Table it will be seen that the average age of all the male decedents in the State, in 1892, was 32.96 years, and that the average age of all the female decedents, in the same year, was 37.75 years; the average age of all decedents, of both sexes, 35.35 years.

The average age of the total decedents in the State, in 1892, was less than one year greater than the average for 1891.

The average age of the male decedents, in 1892, was very little greater, and the average age of the female decedents was nearly one and one-half years greater than in the previous year.

The following Table will present, separately, the average age of the male and female decedents, and the average age of all decedents, in each year for thirty-three years; also the average age in six periods of five years each, from 1860 to 1889, inclusive:

Table LIII.

YEARS.	Average Age of Males.	Average Age of Females.	Average Age of All.	Average Age, 5-year periods, 1860-1889.
1860	28.51	30.70	29 65	
1861	26.95	30.58	28 82	
1862	29.61	32 65	31.15	29.71
1863	28.29	30.86	29 56	
1864	28.13	30.13	29.40	
1865	26.38	28 97	27.69	
1866	31.13	35.07	33.09	
1867	32.16	35.86	31.01	31.58
1868	30.47	35 08	32.85	
1869	28.62	31.29	30.25	
1870	31.02	32.75	31 90	
1871	32.57	34.43	33.52	
1872	28.41	31.15	29.77	30.30
1873	26.18	28.62	27.42	
1874	28.03	31.66	28.86	
1875	29.72	32.75	31.27	
1876	31.47	33.21	32.37	
1877	29 25	31.56	30.45	31.29
1878	29.02	31.11	30 09	
1879	31.29	33.24	32.29	
1880	29.62	32.06	30.86	
1881	30.99	34.07	32.55	
1882	31.33	35.57	33.50	33.24
1883	33.61	37.41	35.55	
1884	32.29	35.12	33.76	
1885	33.53	35.60	31.59	
1886	33 02	34.91	34 01	
1887	30 97	32.91	31.95	33.81
1888	33.17	35.74	31.53	
1889	32.20	35.74	34.00	
1890	31.01	34 26	32 62	
1891	32.70	36.28	34.47	
1892	32.96	37.75	35.34	

The above table shows that the average longevity of the decedents in Rhode Island increased over three years, during a period of twenty-five years, ending with 1884, and of over four years increase, as the average of the five years preceding 1890.

The following Table will present some of the facts of the preceding as occurring in the different divisions of the State, as well as of the State at large. It will show the average age of the decedents in each of the larger divisions of the State, in each of the last four years, and also the average of each of six periods of five years each, comprising the thirty years from 1858 to 1887, inclusive:

TABLE LIV.

DIVISIONS OF THE STATE.	1892.	1891.	1890.	1889.	1883-1887, 5 years.	1878-1882, 5 years.	1873-1877, 5 years.	1868-1872, 5 years.	1863-1867, 5 years.	1858-1862, 5 years.
Bristol County....	41.89	41.39	42 17	37.84	38.45	36.68	33.61	35 12	34.78	35 56
Kent County.........	34.81	32.62	31.01	29.89	37.66	37.11	36.20	34.77	35.81	32.15
Newport County....	40.37	39.95	39.66	43.26	42.41	39.21	40.68	40.01	33.54	35 01
*Providence County.	32.42	32.43	31.00	32.00	31.83	30.60	28.46	25.26	29.16	28.44
Providence City....	34.13	33.39	31.86	32.97	32.19	29.50	27.19	25.45	28.50	25.78
Washington County.....	48.47	47.81	44.67	48.52	43 39	41 01	41.14	39.67	30.87	34 21
Whole State....	35 34	34.47	32.62	34.00	33 97	31.86	30.28	31.66	30 73	29.42

By reference to Table LIV, it will be seen that the average age of all decedents during the last four years is about five and one-quarter years greater than the first period of five years, 1858–1862.

PERCENTAGE OF DECEDENTS BY DIFFERENT AGES.

In Table VI, on pages 12 to 17, inclusive, will be found the number of deaths in 1892, in each town and each county, of each sex, and in each period of life, with the percentage of the whole number of deaths in each division to the population of the same by estimation from the census of 1890.

The following Table shows the percentages of decedents in each division of ages, to whole number of deaths, in each of the last seven years, and in the aggregate for two periods; one of twenty years and seven months, from June 1st, 1852, to December 31st, 1872, inclusive; and one of ten years, from 1873 to 1882, inclusive:

---

* Exclusive of Providence City.

Table LV.

Periods of Life.	1892.	1891.	1890.	1889.	1888.	1887.	1886.	10 years, 1873 to 1882.	20 years, 7 months, 1852 to 1872.
Under 1 year....	22.0	22.6	22.6	21.0	19.3	19.6	19.9	18.9	17.8
1 and under 2....	4.9	5.4	5.8	5.9	5.9	6.6	5.3	7.6	8.8
2 and under 5....	4.0	4.6	5.7	5.4	6.6	8.2	6.5	8.4	8.7
Total under 5	30.9	32.6	34.1	32.3	31.8	34.4	31.7	34.9	35 3
5 and under 10	2.4	2.5	3.2	3.6	4.2	5.2	4.0	5.0	4.8
10 and under 20..	4.8	4.0	4.5	5.4	5.7	5.1	5.5	5.8	6.0
20 and under 30....	8.3	8.5	8.4	8.3	9.0	7.6	8.7	9.2	9.6
30 and under 40............	8.2	8.4	8.3	7.5	7.5	7.0	7.5	7.8	8.4
40 and under 50..	8.0	7.7	7.5	7.9	7.9	6.7	7.4	6.9	7.3
50 and under 60...	9.0	9.2	8.5	8.3	8.4	8.0	8.1	7.2	7.0
60 and under 70..	11.0	10.3	9.3	9.8	9.5	9.9	9.1	8.2	7.6
70 and under 80.......... .	9.9	9.9	9.6	10.1	9.0	9.2	10.6	8.8	7.2
80 and under 90....	6.3	5.6	5.5	5.6	5.6	5.3	5.3	5.1	5.1
Over 90 and not stated.......	1.2	1.3	1.1	1.2	1.4	1.6	2.1	1.1	1.1
Total........	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

The large proportion of the mortality of children under one year of age, reached during the previous two years, was nearly held during 1892. Compared with the average of 30 years, ending with 1882, the average proportion, during the last eight years, was nearly 2 per cent., or about 20 in every one thousand deaths more than the average in the longer period.

The proportions in the other periods were not greatly different from previous years, although there was some increase of percentage in the age periods above fifty years.

The following Table will present the varying proportions of deaths to whole number of deaths, in four different periods of life, from 50 years of age to 90 years, grouped in three periods of averages of ten years each, and one period comprising the nine years, 1883–1891, and in 1892.

TABLE LVI.

AGE OF DECEDENTS.	1st Decade, 1852-1862.	2d Decade, 1863-1872.	3d Decade, 1873-1882.	9 Years, Ending 1891.	1892.
50 to 60	6.7 per cent.	7.3 per cent.	7.2 per cent.	8.2 per cent.	9.0 per cent.
60 to 70	6.9 "	8.3 "	8.2 "	9.4 "	11.0 "
70 to 80	7.3 "	8.4 "	8.8 "	9.5 "	9.9 "
80 to 90	4.6 "	5.4 "	5.1 "	5.6 "	6.3 "

COLORED DECEDENTS.

There were 234 deaths of persons of color during 1892.

The towns from which they were returned and number in each were as follows:

Providence City	143
Newport City	33
Barrington	1
Cranston (State Institutions)	13
Bristol	5
East Greenwich	1
Warwick	7
East Providence	3
Lincoln	3
Pawtucket	8
North Kingstown	2
South Kingstown	3
Jamestown	1
Scituate	1
Westerly	7
Smithfield	3
Hopkinton	1
Johnston	1
Total	236

Season.—The deaths in the different months were as follows:

Months.	Deaths.	Months.	Deaths.	Months.	Deaths.	Months.	Deaths.
January	31	April	28	July	21	October	13
February	15	May	18	August	17	November	12
March	21	June	18	September	27	December	15
First Quarter	67	Second Quarter	64	Third Quarter	65	Fourth Quarter	40

First six Months, 131; Second six months, 105; Total, 236.

The following summary will show the proportion, to the whole estimated colored population (7,393 by census of 1890), of each of the events of birth, marriage and death of colored persons, during the fifteen years from 1878 to 1892, inclusive:

	One Birth in every	One Person married in every	One Death in every
1878	36.4	39.2	40.2
1879	39.6	51.4	37.3
1880	47.1	43.3	44.0
1881	34.3	39.2	35.4
1882	36.8	44.5	45.4
1883	33.4	63.3	39.7
1884	31.8	46.0	34.5
1885	36.7	51.7	40.1
1886	34.6	43.2	37.8
1887	35.8	38.9	37.2
1888	37.6	55.0	38.0
1889	38.7	52.0	40.0
1890	45.3	57.6	41.0
1891	42.8	41.2	36.4
1892	40.6	38.3	31.3

In every one thousand of the colored population there were, in 1892,

Of Births.	Of Persons Married.	Of Deaths.
24.6	25.9	31.9

The following exhibit will show the number of living births, marriages and deaths among the colored population of Rhode Island, during ten years, from 1861 to 1870, inclusive; 10 years, from 1871 to 1880, inclusive; 10 years, from 1881 to 1890, inclusive, and for 1891 and 1892, and the aggregate of the same:

10 years, 1861-1870	1,131 births	557 marriages	1,153 deaths.
10 years, 1871-1880	1,615 births	705 marriages	1,573 deaths.
10 years, 1881-1890	1,954 births	752 marriages	1,860 deaths.
1891	173 births	95 marriages	204 deaths.
1892	182 births	98 marriages	236 deaths.
Total, 32 years	5,055 births	2,207 marriages.	5,026 deaths.

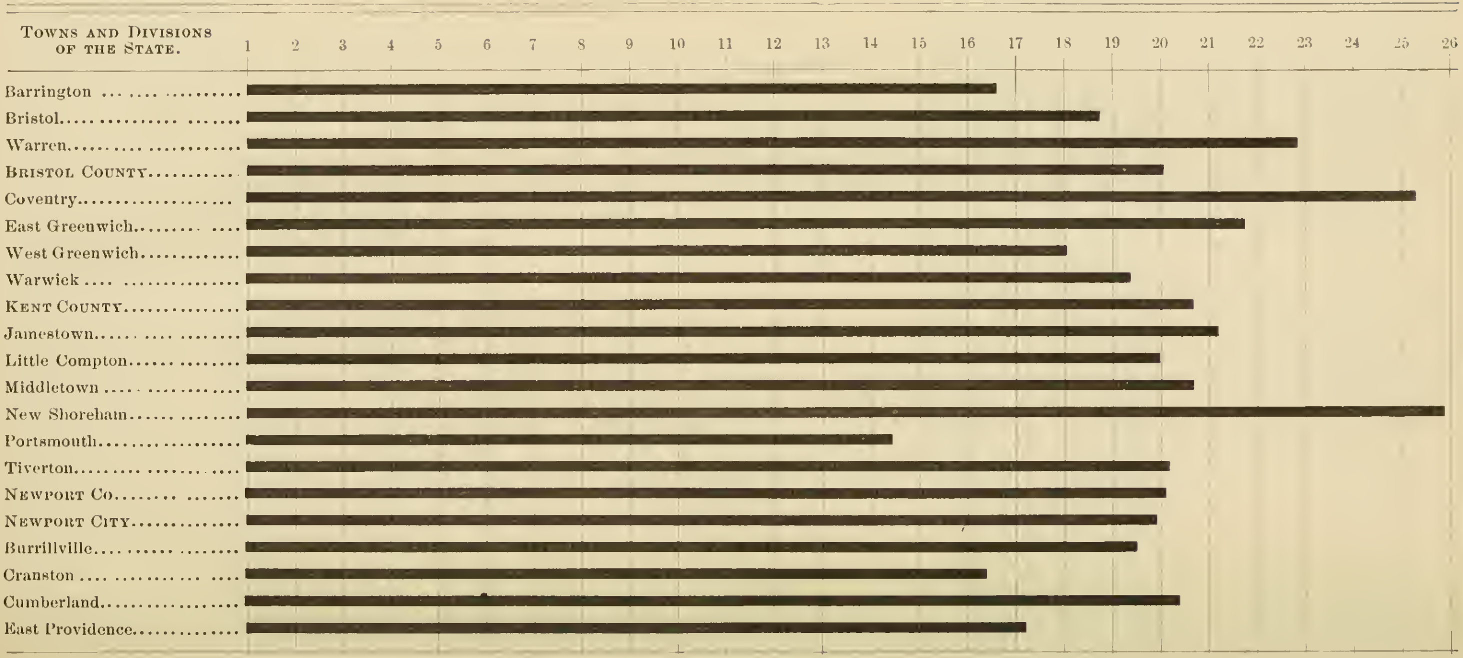
Excess of births over deaths during the last thirty-two years 29

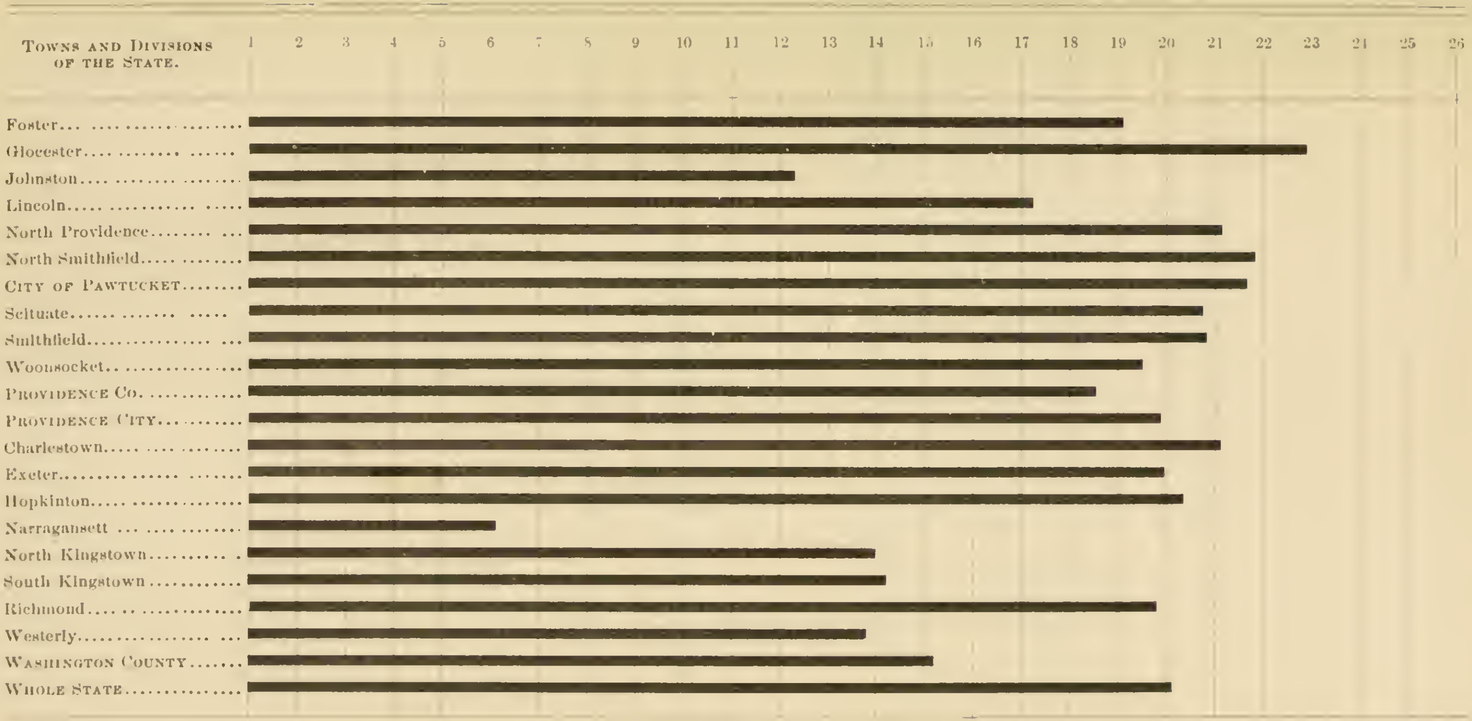
During the first ten years (1861–1870) there were twenty-two more deaths than births; during the second ten (1871–1880) forty-two more births than deaths; during the last ten years (1881–1890) ninety-four more births than deaths. For the thirty-two years there was an average excess of less than one birth a year over the deaths. During 1891, the number of births was thirty-one less than the number of deaths. During 1892, the number of births was 54 less than the number of deaths. Still-born not included with births nor deaths.

DEATH RATES.

Diagram II.—Showing the number of deaths in every 1000 of the population, in each town and each county in the State during the year 1892, computed upon an estimated increase of the population by the Census of 1890.

For explanation see foot note on next page.





The figures at the top of the perpendicular lines indicate, in whole numbers, the number of deaths during the year in every 1000 persons. The spaces are fractional parts of one. For instance, the heavy horizontal line against Barrington, at the top of this diagram, reaches across about six-tenths of the space between the perpendicular lines 16 and 17. It shows the death rate of Barrington, in 1892, was about sixteen and six-tenths in every 1000 of the population.

CAUSES OF DEATH, 1892.

The statistics of the causes of death in Rhode Island, in 1892, may be found in Tables VII, VIII, IX and X. The whole number of deaths, as previously stated, was 7,396. The number of which the cause of death was reported was 7,368, and the number of which the cause was not stated was 28.

The following Table shows the number of deaths in 1892, in each large division of the State, and the number and proportion in each division from which causes were reported unknown:

TABLE LVII.

1892.	Bristol County.	Kent County.	Newport County Towns.	Providence County Towns.	Washington County.	Newport City.	Pawtucket.	Providence City.	Woonsocket.	Whole State.
Number of deaths.	232	598	187	1,556	368	401	642	2,964	445	7,396
Cause not stated	.....	....	....	10	2	1	1	14	.....	28
One in	......	.....	....	156	184	404	642	212	......	264

TABLE LVIII.

Proportion of Deaths reported with "Cause Unknown" in each Division of the State, for a period of thirty-eight years, from 1855 to 1892, inclusive.

YEARS.	STATE DIVISIONS.							In every 1000 Deaths.
	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.	Whole State.	
1855-1859, One in every	19.8	7.6	15.4	5.8	34.3	5.3	9.0	111.1
1860-1864, One in every	25.7	10.6	17.8	8.4	35.3	25.1	14.7	68.0
1865-1869, One in every	60.2	12.6	28.7	7.1	58.8	21.3	14.0	71.4
1870-1874, One in every	43.7	27.5	16.2	10.8	84.6	19 0	19.2	52.1
1875, One in every	55 0	7.4	15.6	13.7	91 2	11 9	20.9	47.8
1876, One in every	11.5	7.9	18.5	9.9	124.3	22 8	19.3	45.8
1877, One in every	201.0	17.7	9.7	11.9	323.0	16.0	23.2	43.1
1878, One in every	32.1	7.4	9.0	13.7	124.2	21.7	21.1	47.4
1879, One in every	16.6	9.2	12.4	9.5	225.1	8.6	17.6	56.8
1875-1879, One in every	63.2	9.9	13.0	11.7	177.6	16.2	20.4	49.0
1880, One in every	21.9	23.5	13.5	10.5	122.3	17.8	20.7	48.3
1881, One in every	204.0	13.0	11.2	7.3	143.0	6.5	14.4	69.4
1882, One in every	37.6	11.6	10.9	10.6	187.0	7.7	18.8	53.2
1883, One in every	40.4	15.9	15.0	15.3	392.8	17.0	28.4	36.2
1884, One in every	100.0	40.0	81.6	91.7	372.1	94.0	122.4	8.2
1880-1884, One in every	80.8	20.8	26.4	27.1	243.4	28.6	40.9	24.5
1885, One in every	185.0	355.0	137.0	45.6	309.1	52.2	91.3	10.9
1886, One in every	110.5	192.5	86.0	87.0	195.1	55.2	113.7	7.9
1887, One in every	212.0	343.0	73.5	782.6	264.0	351.0	333 7	3.0
1888, One in every	251.0	408.0	152.7	164.3	293.8	368.0	235 7	4.3
1889, One in every	208.0	152.0	221.0	176.7	120.0	338.0	160.0	6.2
1885-1889, One in every	493 5	389 0	134.0	251.2	236.4	233 0	168.8	6.4
1890, One in every	......	......	236.0	109.0	190.0	159.0	161.0	6.2
1891, One in every	......	......	598.0	159.0	175 0	154.0	194 0	5.1
1892, One in every	......	......	591.0	240.0	212 0	184.0	264 0	3.7

---

* Not including Providence City.

TABLE LIX.

Exhibiting the Order in regard to Number and Proportion of Decedents from Thirteen Principal Causes of Death.

1892.		1891.		1890.		1889.		1888.		1887.		June 1st, 1852, to Dec. 31st, 1887—35 yrs. 7 mos.		Per 1000 of Whole No. of Deaths, 35 years, 7 months.
Whole Number	7,396	Whole Number	6,620	Whole Number	6,931	Whole Number	6,259	Whole Number	6,591	Whole Number	6,340	Whole Number	129,231	
Consumption	759	Consumption	740	Consumption	852	Consumption	727	Consumption	800	Consumption	710	Consumption	19,847	154.3
Pneumonia	655	Pneumonia	568	Cholera Infantum	582	Pneumonia	483	Pneumonia	508	Pneumonia	488	Pneumonia	8,298	64.5
Cholera Infantum	633	Cholera Infantum	516	Pneumonia	569	Heart, Diseases of	460	Cholera Infantum	467	Brain, Diseases of	440	Old Age	6,797	53.0
Heart Diseases	506	Heart Diseases	480	Heart, Diseases of	405	Cholera Infantum	396	Heart, Diseases of	467	Heart, Diseases of	406	Cholera Infantum	6,821	53.1
Apoplexy	362	Apoplexy	335	Apoplexy	341	Apoplexy	323	Apoplexy	367	Cholera Infantum	355	Scarlatina	4,971	38.5
Influenza	336	Bronchitis	247	Bronchitis	275	Bronchitis	260	Old Age	290	Apoplexy	328	Dysentery and Diarrhœa	5,166	40.1
Accidents	309	Kidney Diseases	215	Accidents	250	Old Age	227	Brain, Diseases of	281	Diphtheria	287	Heart, Diseases of	5,612	43.6
Bronchitis	308	Accidents	233	Kidney, Dis. of	229	Accidents	216	Fever, Typhoid	235	Old Age	278	Fevers, Typhoid, &c	4,632	36.1
Kidney Diseases	258	Brain Diseases	222	Brain, Diseases of	217	Kidney, Dis. of	210	Bronchitis	228	Scarlatina	266	Apoplexy and Paralysis	5,050	39.2
Old Age	256	Old Age	185	Diphtheria	211	Cancer	189	Kidney, Dis. of	213	Accidents	206	Accidents, all kinds	3,921	30.3
Brain Diseases	246	Diphtheria	177	Old Age	198	Brain, Diseases of	189	Scarlatina	207	Bronchitis	176	Diphtheria*	3,777	29.2
Cancer	181	Cancer	177	Influenza	168	Diphtheria	181	Cancer	193	Kidney, Dis. of	169	Convulsions	2,859	22.1
Fever, Typhoid	133	Fever, Typhoid	119	Cancer	165	Diarrhœa and Dysentery	159	Diphtheria	191	Cancer	159	Croup	2,161	19.1

* 30 years, 1858 to 1887, inclusive.

The number of deaths from consumption, in 1892, was 19 more than in the previous year, and about the same as the average of the previous ten years, notwithstanding the increase of population.

From pneumonia there was an increase of 87 deaths over that of the previous year, or about 15 per cent. The fatality from pneumonia has been slowly increasing, in proportion to whole number of deaths, for the last twenty years.

From cholera infantum there was an increase of 87 deaths over 1891, and the tendency for the last fifteen years has been toward a considerably increased proportion.

Diseases of the heart have also been on the increase as causes of death, for fifteen years and more, the mortality in 1892 being the largest ever recorded in this State.

There was an increase of 71 deaths from old age in 1892.

During the last fifteen years, apoplexy, bronchitis, and kidney diseases have, as well as those mentioned above. increased in proportion as causes of death, and scarlatina, typhoid fever, diarrhœa and dysentery have decreased.

COMPARATIVE STATISTICS

AND

COMMENTS.

There have been presented in the preceding pages, numerically and in tabular form, the different causes of death in Rhode Island, in 1892, with various summaries and illustrations. In Tables VII and VIII they were presented at considerable length, in various specific terms; in Table IX more or less grouped in a general nosological arrangement; and in Table X the same for a period of thirty-nine years.

In Table VII the number of deaths from *each cause* and of *each sex* is shown, for *each month* in the year, and the *parentage* of the decedents from *each cause* during the year.

In Table VIII the number of decedents of *each sex* from *each cause*, in the *different periods of life*, is given.

In Table IX, with the classification and percentage of causes of death, the number of each general cause, in each division of larger population, is given.

In Table X a nosological summary of causes of death for the whole State, in each of thirty-nine years, is given.

Table LX is a compend in part of Tables VII, VIII and IX, previously alluded to, and contains the particulars of the most important causes of death in 1892, and comprises the principal causes which will be commented upon in the following pages:

TABLE LX.

Deaths in Rhode Island from Twenty-six Principal Causes, 1892.

		Accidents and Negligence.	Apoplexy and Paralysis.	Brain Diseases.	Bronchitis.	Cancer.	Cholera Infantum.	Consumption.	Croup	Diarrhœa.	Diphtheria.	Dysentery.	Enteritis.	Fever, Typhoid.	Heart Diseases.	Influenza.	Kidney Diseases.	Liver Diseases.	Measles.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia.	Rheumatism.	Scarlatina.	Stomach Diseases.	Whooping Cough.
Total Mortality.		309	362	246	308	181	633	759	89	128	89	71	73	133	506	336	258	89	28	256	62	34	655	48	67	67	25
SEX.	Males	225	176	130	147	53	336	360	52	64	48	36	35	75	260	142	135	39	14	95	24	19	335	20	38	35	10
	Females	84	186	116	161	128	297	399	37	64	41	35	38	58	246	194	123	50	14	161	38	15	320	28	29	32	15
PAR'AGE.	Native	115	195	122	117	103	210	249	44	56	44	26	29	55	252	170	127	34	10	168	24	10	265	19	21	21	14
	Foreign	194	167	124	191	78	423	510	45	72	45	45	44	78	254	166	131	55	18	88	38	24	390	29	48	46	11
SEASON.	January	21	40	24	59	18	3	84	12	5	7	3	3	13	48	198	21	7	3	38	1	3	146	3	6	3	6
	February	15	21	25	50	10	6	63	12	3	9	...	3	11	45	52	15	7	1	24	5	3	74	3	7	4	4
	March	16	37	21	33	21	4	55	11	7	12	7	4	6	48	31	21	8	4	20	5	3	84	5	8	4	2
	April	20	22	24	30	11	2	72	5	5	8	2	3	5	44	27	23	5	3	16	4	3	76	3	2	6	1
	May	31	27	26	23	16	5	75	7	1	9	1	5	9	51	9	15	6	6	18	9	3	63	7	7	9	1
	June	26	30	17	10	9	38	55	3	7	8	7	7	6	33	6	26	10	4	21	5	3	23	5	6	4	2
	July	46	33	24	19	11	264	61	2	32	6	14	17	12	31	...	23	7	2	14	10	2	14	4	2	6	1
	August	37	26	24	10	17	194	63	2	25	5	18	15	13	41	2	26	12	2	20	10	...	11	1	3	5	5
	September	30	28	17	20	20	76	64	2	18	3	13	5	18	48	3	22	6	...	26	4	...	15	3	2	9	...
	October	20	27	15	12	15	30	51	9	16	5	4	3	14	33	2	24	7	...	16	2	4	37	3	4	8	..
	November	27	34	13	20	10	7	63	10	4	9	1	4	15	34	1	18	8	..	16	1	7	58	7	5	5	1
	December	20	37	16	22	23	4	53	11	5	8	1	4	11	50	5	21	6	3	27	6	3	54	4	15	4	2

TABLE LX.—Continued.

		Accidents and Negligence.	Apoplexy and Paralysis.	Brain Diseases.	Bronchitis.	Cancer.	Cholera Infantum.	Consumption	Croup.	Diarrhœa.	Diphtheria.	Dysentery.	Enteritis.	Fevers, Typhoid.	Heart Diseases.	Influenza.	Kidney Diseases.	Liver Diseases.	Measles.	Old Age.	Peritonitis.	Pleurisy.	Pneumonia.	Rheumatism.	Scarlatina.	Stomach Diseases.	Whooping Cough.
AGES.	Under 5 years	34	2	126	136	...	633	35	68	79	43	24	23	4	16	46	4	8	27	...	6	2	139	3	41	14	24
	5 to 10	15	...	10	2	...	...	8	19	2	26	...	6	6	11	2	1	1	...	...	2	...	10	6	20	2	...
	10 to 15	19	...	11	1	...	...	13	...	...	13	2	4	11	14	4	5	...	...	...	7	...	9	4	4	1	...
	15 to 20	17	1	9	2	...	...	76	1	1	...	1	2	18	13	2	5	2	...	...	6	...	10	1	2	...	...
	20 to 30	52	6	10	13	2	...	231	...	2	4	2	6	42	21	13	24	5	...	...	16	3	39	5	...	7	1
	30 to 40	37	17	16	16	20	...	169	...	2	...	2	5	20	32	19	33	9	...	...	7	4	69	5	...	12	...
	40 to 50	42	40	13	9	36	...	96	...	2	...	4	11	15	59	25	28	15	1	...	6	7	75	4	...	7	...
	50 to 60	24	69	16	26	38	...	73	...	5	2	9	5	10	93	33	58	18	...	...	3	3	74	5	...	9	...
	60 to 70	25	91	18	41	42	...	35	1	10	...	10	6	6	111	74	42	16	...	10	5	10	110	7	...	9	...
	70 to 80	22	95	12	34	32	...	19	...	12	...	7	3	1	104	74	35	13	...	74	1	4	71	8	...	5	...
	80 and over	19	49	4	28	11	...	4	...	13	...	10	2	...	31	44	23	2	...	172	2	1	44	...	...	1	...
	Not stated	3	1	1	...	...	...	...	...	...	1	...	...	...	1	...	...	...	...	...	1	...	5	...	...	...	...
LOCALITIES.	Bristol County	8	12	8	5	7	18	29	1	5	1	1	1	5	22	11	9	3	...	9	4	3	18	1	1	1	...
	Kent County	13	29	22	15	16	77	51	10	8	1	6	5	12	47	27	11	5	2	24	6	1	57	7	4	7	1
	Newport County Towns	9	12	10	2	5	12	11	1	3	1	1	...	4	21	8	4	...	2	15	1	2	15	1	...	3	...
	Newport City	12	27	17	19	11	31	34	20	...	7	4	2	5	27	5	20	4	2	14	1	3	37	7	4	7	3
	Providence County Towns	63	79	51	71	33	160	163	12	36	15	15	10	27	97	61	46	15	1	49	15	6	127	6	9	12	5
	Pawtucket	22	29	17	46	17	71	51	2	11	7	2	6	15	14	36	15	7	...	33	10	8	41	5	5	4	6
	Providence City	158	134	83	130	75	201	342	33	58	39	31	37	51	200	141	128	45	11	71	17	10	277	18	38	29	9
	Woonsocket	15	16	28	13	7	50	51	7	5	1	7	8	7	22	18	9	5	10	9	4	...	48	1	6	3	1
	Washington County	9	24	10	7	10	13	27	3	2	17	4	4	7	26	26	16	5	...	32	4	1	35	2	...	1	...

DEATHS FROM ACCIDENTS.

The number of deaths from accidental causes of all kinds, reported in Rhode Island, in 1892, was 309. This number is 76 more than during 1891.

Among the 309 deaths from accident there were 17 from asphyxia; 21 from burns and scalds; 48 from drowning; 33 from falls; 60 from fractures and contusions of various kinds; 20 from poison; 29 from accidents of various forms on railroads; and 81 from numerous other accidental circumstances.

Of the whole number of deaths by accident 225 were males and 84 were females; 115 were of native, and 194 were of foreign parentage.

Of the sexes the proportion was 72.82 per cent. of male decedents to 27.18 per cent. of female decedents.

Of parentage, 63 per cent. was of foreign, and 37 per cent. of native.

The number of deaths in each division of the year was as follows:

First Quarter	52	Third Quarter	113
Second Quarter	77	Fourth Quarter	67
First half	129	Second half	180
Whole Year	309		

In regard to periods of life, the decedents from accidental causes were divided as follows: Under 5 years, 34; 5 and under 10, 15; between 10 and 20, 36; between 20 and 40, 89; between 40 and 60, 66; over 60, 66; and 3, age not stated.

In regard to sectional divisions of the State, 8 of the deaths from accidental causes were in Bristol county; 13 in Kent county; 21 in Newport county; 9 in Washington county, and 258 in Providence county.

The whole number of deaths from accidental causes, in 1892, *in proportion to the whole number of deaths* from specified causes, in the State, was about 42 in every one thousand.

In the following Table may be found the number, sex, parentage and locality of mortality from accidents, for twenty-eight years, ending December 31, 1892:

TABLE LXI.

Mortality in the State from Accidents, with the Percentage of the Whole Number of Deaths; Sex, Parentage, and Locality, for twenty-eight years, from 1865 to 1892, inclusive, in three periods of five years each, and for each of the last thirteen years.

YEARS.	Whole Number.	VARIETIES.									SEX.		PARENTAGE		STATE DIVISIONS.					
		Burns and Scalds.	Drowning.	Falls.	Fractures and Contusions.	Poisoning.	Railroad.	Suffocation.	Various and Unspecified	Per cent.	Males.	Females.	Native.	Foreign	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1865-1869	515	81	114	70	...	14	32	1	203	3.31	397	118	245	270	26	36	52	921	166	13
5 years, 1870-1874	612	73	159	89	..	17	68	10	196	3.16	493	119	284	328	22	45	49	219	233	44
5 years, 1875-1879.. ...	658	71	168	75	...	31	52	19	242	3.02	487	171	283	375	20	45	50	192	303	48
1880...	146	21	33	14	..	5	18	. .	55	3.02	108	38	57	89	5	17	10	39	71	4
1881	155	16	29	19	...	9	20	19	43	3.09	107	48	62	93	5	17	12	60	56	5
1882	178	17	40	31	...	6	16	8	60	3.50	130	48	72	106	5	9	15	60	80	9
1883	153	18	27	21	..	6	16	12	53	2.83	117	36	61	92	4	8	9	63	66	3
1884	197	20	41	31	..	7	16	11	71	3.82	147	50	90	107	5	19	14	65	76	18
5 years, 1880-1884.. ..	829	92	170	116	...	33	86	50	282	3 26	609	220	342	487	24	70	60	287	349	39
1885... ...	173	19	42	25	. .	9	15	9	51	3.20	135	38	72	101	5	6	8	58	83	13
1886	190	23	58	19	...	6	20	9	55	3 25	141	49	84	106	16	11	16	62	72	13
1887	206	17	39	17	23	7	24	11	65	3 24	158	48	92	114	5	11	23	81	71	15
1888 .. .	190	27	46	18	8	12	25	8	46	2.87	145	45	63	127	4	6	14	70	88	8
1889	216	20	52	31	25	7	23	9	46	4.10	146	70	88	128	2	14	13	73	101	13
5 years, 1885-1889 .. .	975	106	237	110	56	41	107	49	266	3 55	725	250	399	576	32	48	71	344	415	62
1890	250	20	71	32	26	11	31	12	47	3.60	199	51	99	151	7	17	21	75	111	16
1891	233	18	52	21	29	16	30	17	50	3.51	174	59	78	155	5	18	16	95	89	10
1892	309	21	48	33	60	20	29	8	90	4.18	225	84	115	194	8	13	21	100	158	
Total, 28 yrs	4381	482	1049	546	171	183	435	166	1376	3.28	3309	1072	1846	2536	144	292	316	1501	1821	271

* Exclusive of Providence City.

TABLE LXII.

Mortality in the State from Alcoholism, with the Percentage of the Whole Number of Deaths, Sex, Parentage and Locality, for twenty-eight years, from 1865 to 1892, inclusive.

YEARS.	Number of Deaths from Alcoholism.	Per cent.	SEX.		PARENTAGE.		STATE DIVISIONS.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 years, 1865-1869..	55	.38	48	7	27	28	1	4	5	12	29	4
5 years, 1870-1874..	93	.51	74	19	40	53	4	7	9	33	37	3
5 years, 1875-1879..	81	.39	56	25	27	54	2	4	7	17	48	3
1880	15	.32	9	6	5	10	1	.....	1	4	8	1
1881....	24	.51	17	7	5	19	1	.....	1	7	14	1
1882	28	.58	16	12	8	20	......	......	.....	9	18	1
1883	29	.54	17	12	7	22	......	1	1	10	16	1
1884	27	.53	19	8	10	17	......	1	4	9	12	1
1880-1884	123	50	78	45	35	88	2	2	7	39	68	5
1885	22	.41	16	6	6	16	2	1	.....	11	7	1
1886	12	.20	9	3	2	10	1	....	1	3	7	.....
1887..........	16	.25	14	2	4	12	2	2	2	5	4	1
1888	16	.32	10	6	5	11	.....	......	2	5	9	.....
1889	31	.50	23	8	12	19	2	1	1	13	14	.....
1885-1889	97	.34	72	25	29	68	7	4	6	37	51	2
1890	25	.37	20	5	8	17	2	.....	......	11	11	1
1891..........	29	.47	22	7	8	21	1	1	4	10	13	.....
1892	36	...	27	9	8	28	1	...	4	12	17	2
Total, 28 years....	539	...	397	142	182	357	20	22	42	171	264	20

* Pawtucket and Woonsocket included.

APOPLEXY AND PARALYSIS.

There were 362 deaths from apoplexy and paralysis in Rhode Island. in 1892, according to the returns. The number reported is 27 more than in the year 1891.

Of the sexes, there were 176 males and 186 females.

Of parentage, 195 were of native parentage, and 167 of foreign.

As observed in previous reports, the older native population has steadily been, in a very large proportion, more prone to apoplexy than the foreign, or the children of the foreign population.

It will be observed that the proportion of deaths from apoplexy and paralysis, to the whole mortality from all causes, has steadily increased from about three and one-half per cent., during the first quinquennial (1865–1869), to nearly five and one-half per cent. during the quinquennial 1885–1889.

The following Table will present the sex, parental and local relations of apoplexy and paralysis, as causes of death, during the last twenty-eight years: (Providence city not included in the Providence county statement.)

TABLE LXIII.

Mortality in the State from Apoplexy and Paralysis, 1865 to 1892, inclusive.

YEARS.	Total Deaths for Year.	Number from Apoplexy and Paralysis	Per cent.	SEX.		PARENTAGE		DIVISIONS OF THE STATE.					
				Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.	Providence City.	Washington County.
1865-1869.	15,558	544	3.48	268	276	440	104	47	51	81	129	210	36
1870.....	3,238	130	4.32	68	62	105	25	14	10	10	39	52	5
1871......	3,344	156	4.66	73	83	113	43	10	17	15	49	61	13
1872.....	4,247	125	2.97	62	63	96	29	17	9	10	27	52	10
1873......	4,403	134	3.04	59	75	109	25	9	8	17	26	57	17
1874.	4,229	156	3.69	84	72	120	36	14	10	16	42	59	15
1870-1874.	19,461	701	3.60	346	355	543	148	64	54	68	174	281	60
1875......	4,317	166	3.61	79	87	133	33	7	13	17	46	75	8
1876......	4,116	165	4.01	79	86	130	35	13	11	13	45	68	15
1877......	4,450	181	4.07	87	94	123	58	10	10	16	52	74	19
1878......	4,441	188	4.23	104	84	145	43	12	16	21	58	66	15
1879......	4,472	220	4.92	114	106	146	74	12	9	29	71	89	10
1875-1879	21,796	920	4.22	463	457	677	243	54	59	96	272	372	67
1880......	4,829	215	4.67	109	106	157	58	18	13	22	71	78	13
1881......	5,016	244	4.86	116	128	170	74	17	15	25	70	101	16
1882......	5,074	265	5.22	139	126	168	97	15	29	24	65	117	15
1883.	5,282	275	5.22	138	137	192	83	11	28	22	75	118	21
1884......	5,141	298	5.80	135	163	176	122	21	14	28	108	105	22
1880-1884.	25,342	1,297	5.12	637	660	863	434	82	99	121	389	519	87
1885......	5,389	289	5.38	144	145	183	106	16	18	28	99	110	18
1886......	5,849	333	5.70	173	160	230	103	11	27	32	108	120	35
1887.....	6,340	328	5.17	161	167	213	115	51	27	23	101	128	28
1888......	6,594	367	5.41	164	203	234	133	29	26	29	113	137	33
1889......	6,259	323	5.17	140	183	204	119	23	32	28	101	106	33
1885-1889.	30,431	1,640	5.39	782	858	1,064	576	100	130	140	522	601	147
1890......	6,934	341	4.91	168	173	206	135	21	21	23	110	144	22
1891......	6,620	335	5.08	160	175	207	128	17	29	32	118	118	21
1892......	7,396	362	4.89	176	186	195	167	12	29	39	124	134	24

TABLE LXIV.

Ages of Decedents from Apoplexy and Paralysis, in each of the last twenty-eight years.

APOPLEXY AND PARALYSIS.	PERIODS OF LIFE.								
	Under 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	Not stated.
1865	......	3	5	6	19	20	28	19	......
1866	1	1	7	16	9	24	27	7	......
1867	2	......	6	6	15	38	40	17	......
1868	2	3	3	11	16	27	31	16	2
1869	1	1	5	12	20	28	34	15	1
1870	4	1	10	9	12	33	41	20	......
1871	3	4	7	14	21	46	45	15	1
1872	1	4	5	17	20	26	41	11	......
1873	2	3	4	14	22	35	37	16	1
1874	1	2	9	9	30	39	40	25	1
1875	6	2	8	19	23	40	45	22	1
1876	4	4	4	13	25	43	49	23	......
1877	1	2	9	12	24	50	61	22	... ..
1878	4	2	7	14	41	40	53	26	1
1879	4	6	11	18	27	57	59	38	1
1880	1	2	8	18	21	59	70	34	2
1881	1	7	11	20	36	55	70	42	2
1882	4	5	14	28	41	57	77	38	1
1883	8	4	11	19	45	56	83	49	......
1884	10	7	16	21	32	68	95	45	4
1885	8	5	7	25	29	76	94	44	1
1886	7	8	10	25	52	65	112	51	3
1887	12	6	13	26	50	90	96	9	1
1888	10	4	18	29	61	85	100	8	1
1889	6	6	11	36	45	87	92	39	1
1890	7	5	13	29	52	84	100	50	1
1891	4	6	15	24	61	88	90	47	... ..
1892	3	6	17	40	60	91	95	49	1
Total	117	99	261	530	909	1,507	1,785	797	27

BRAIN DISEASES.

The number of decedents from diseases of the brain proper, for 1892, was 246.

Of the 246 decedents, 130 were males, and 116 were females.

In regard to parentage, 122 were of native, and 124 of foreign parentage.

The deaths in the different seasons of the year were as follows:

First Quarter	70	Third Quarter	65
Second Quarter	67	Fourth Quarter	44
First half	137	Last half	109
Whole number	246		

Brain diseases occur largely in children. Of the 246 decedents from those causes, in 1892, 162 and more than one-half were under five years of age, and 10 were from five to ten years of age.

The following Table will present the statistics of mortality from diseases of the brain, for twenty-eight years:

TABLE LXV.

Mortality in the State from Brain Diseases, with the Percentage, Sex, Parentage and Locality for twenty-eight years, from 1865 to 1892, inclusive.

YEARS.	Number of Deaths from Brain Diseases.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1865-1869	444	2.85	243	201	281	163	17	23	37	128	209	30
1870-1874.... ..	581	2.99	317	267	335	249	13	31	44	168	314	11
1875...	118	2.73	63	55	69	49	3	6	5	30	65	9
1876	150	3.64	92	58	89	61	3	11	7	39	85	5
1877....	160	3.59	88	72	91	69	3	7	11	49	85	5
1878	142	3.19	75	67	76	66	1	13	12	45	68	3
1879	163	3 65	82	81	88	75	3	13	15	51	75	6
1875-1879.......	733	3.36	400	333	413	320	13	50	50	214	378	28
1880...	164	3.39	87	77	89	75	3	6	12	56	81	6
1881	186	3.69	103	83	85	101	7	11	14	58	91	5
1882....... ...	181	3 50	93	88	92	89	4	10	10	71	80	6
1883...........	187	3.54	96	91	100	87	8	14	15	52	94	4
1884	148	2.88	90	58	77	71	4	9	8	41	83	3
1880-1884.......	866	3.40	469	397	443	423	26	50	59	278	429	24
1885...........	189	3.51	98	91	94	95	2	11	20	53	100	3
1886...........	182	3.09	108	74	84	98	4	14	13	69	78	4
1887...........	203	3.21	120	83	103	100	8	9	14	75	95	2
1888...........	212	3 21	114	98	109	103	4	19	12	76	90	11
1889...........	189	3.58	91	98	96	93	5	12	17	72	78	5
1885-1889.......	975	3.30	551	444	486	489	23	65	76	315	441	25
1890...........	217	3.13	113	104	119	98	7	13	17	90	85	5
1891...........	222	3 36	135	87	108	114	8	19	19	93	78	5
1892	246	3.33	130	116	122	124	8	22	27	96	83	10
Total, 28 years.	4,287	3.59	2,338	1,949	2,307	1,980	115	273	329	1,412	2,017	141

* Providence city not included.

N. B. Cerebro spinal meningitis, hydrocephalus, tubercular meningitis and insanity not included in the above Table.

BRONCHITIS.

The number of decedents, in 1892, whose deaths were reported as having been caused by bronchitis, was 308. This is a larger number than was ever returned in a single year.

Of the 308 decedents, 147 were males, and 161 were females; or at the rate of 91 males to each 100 females.

In relation to parentage, 117 were of native, and 191 of foreign parentage.

In regard to age, 136 of the decedents were under 5 years of age, 5 were between 5 and 20 years, 29 between 20 and 40 years, 35 between 40 and 60 years, and of the remaining 103 decedents above 60 years of age, there were 33 deaths from chronic bronchitis.

During the first four months of the year the decedents from bronchitis numbered 172; during the last four months the number was 74.

The very large increase in the proportionate mortality from bronchitis, during the last twenty years, will scarcely fail to be noticed in Table LXVI.

The following Table will show various facts in relation to the mortality from bronchitis, for twenty-eight years:

TABLE LXVI.

Mortality in the State from Bronchitis, twenty-eight years, 1865 to 1892, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1865-1869	82	.53	32	50	42	40	2	4	9	21	44	2
1870	26	.84	15	11	11	15	......	......	1	8	17	.....
1871	24	.78	10	14	11	13	......	1	1	5	17	.....
1872	25	.65	10	15	11	14	1	1	1	6	16	...
1873	27	.61	12	15	11	16	......	......	1	7	18	1
1874	39	.96	22	17	12	27	......	......	......	6	32	1
1870-1874	141	.72	69	72	56	85	1	2	4	32	100	2
1875	57	1.39	32	25	29	28	......	.....	1	24	33	2
1876	57	1.46	23	34	26	31	......	2	......	7	46	2
1877	69	1.62	32	37	35	34	1	1	1	22	44	.....
1878	80	1.89	30	50	37	43	1	2	6	22	48	1
1879	62	1.47	31	31	31	31	1	1	5	21	34	......
1875-1879	325	1.49	148	177	158	167	3	6	13	93	205	5
1880	91	1.86	49	42	44	47	1	6	6	21	56	1
1881	84	.67	48	36	39	45	1	1	2	25	53	2
1882	100	1.27	39	61	47	53	3	2	6	25	60	4
1883	111	2.10	56	55	51	60	5	2	3	42	57	2
1884	118	2.29	58	60	40	78	6	......	8	42	62	.....
1880-1884	504	1.98	250	254	224	283	16	11	25	155	288	9
1885	168	3.08	82	86	91	77	5	3	13	71	76	.....
1886	174	2.96	75	99	81	93	3	4	9	74	83	1
1887	176	2.77	90	86	60	116	3	6	19	63	84	1
1888	228	3.45	105	123	79	149	3	4	17	110	88	6
1889	260	4.20	128	132	90	170	4	8	18	109	110	11
1885-1889	1,006	3.30	480	526	401	605	18	25	76	427	441	19
1890	275	4.01	140	135	116	159	5	4	15	107	138	6
1891	247	3.71	108	139	95	152	13	15	21	85	111	2
1892	308	4.16	147	161	117	191	5	15	21	130	130	7

---

* Not including Providence City.

CANCER.

There were 181 decedents, in 1892, whose deaths were caused by cancer, according to the returns. The term cancer includes all the various kinds, and in whatever place located.

The varieties of cancer, as reported, may be found in Tables VII and VIII, on pages 20 and 32. They are classed in Table IX as follows: Cancer in various localities, or cancer (various), 82; cancer of the breast, 29; of the liver, 14; of the stomach, 33; of the uterus, 23.

In 1892, the deaths from cancer, in the several divisions of the year, were as follows:

First Quarter	49	Third Quarter	48
Second Quarter	36	Fourth Quarter	48
First half	85	Last half	96
Whole Year	181		

Sex.—Of the 181 decedents from cancer, 53 were males and 128 were females; or 29 males and 71 females in every 100.

Parentage.—There were 103 of native parentage, and 78 of foreign.

The following Table will show the facts of mortality from cancer, in relation to sex, parentage and locality, for twenty-eight years:

TABLE LXVII.

Mortality in the State from Cancer, 1865 to 1892, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 yrs., 1865-1869	303	1.95	94	219	248	55	19	28	38	78	121	19
1870	80	2.58	27	53	66	14	5	12	8	25	27	3
1871	66	2.13	25	41	47	19	......	7	5	25	25	4
1872............	95	2.46	26	69	66	29	4	7	9	21	50	4
1873....	106	2.53	45	61	76	30	4	6	12	32	44	8
1874............	87	2.13	23	64	67	20	4	6	12	24	38	3
1870-1874.......	434	2.23	146	288	322	112	17	38	46	127	184	22
1875	95	2.31	24	71	62	33	3	6	7	25	49	5
1876...	106	2.72	27	79	72	34	5	6	8	27	53	7
1877............	135	3.17	29	106	87	48	3	7	9	37	66	13
1878	119	2.82	38	81	79	40	5	11	8	37	48	10
1879...........	125	2.96	39	86	70	55	9	6	9	28	66	7
1875-1879.......	580	2.66	157	423	370	210	25	36	41	154	282	42
1880............	125	2.72	45	80	73	52	5	10	12	26	68	4
1881............	145	2.90	40	105	90	55	8	10	12	42	65	8
1882	132	2.75	40	92	82	50	5	15	9	43	52	8
1883...	169	3.20	51	118	105	64	3	17	12	49	86	2
1884	156	3.05	39	117	88	68	2	18	21	41	70	4
1880-1884..... ..	727	2.87	215	512	438	289	23	70	66	201	341	26
1885	193	3.59	52	141	114	79	8	9	8	67	88	13
1886	162	2.77	42	120	75	87	6	11	9	37	87	12
1887	159	2.50	49	110	96	63	8	5	10	49	80	7
1888	193	2.93	67	126	128	65	9	10	12	57	88	17
1889.......	189	3.03	65	124	104	85	4	10	13	57	82	23
1885-1889...... .	896	2.94	275	621	517	379	35	45	52	267	425	72
1890	165	2.11	56	109	92	73	14	10	13	46	74	5
1891............	177	2.67	48	129	104	73	8	11	15	46	83	14
1892	181	2.45	53	128	103	78	7	16	16	57	75	10

* Not including Providence City.

CHILD-BIRTH.

Under the head of "Child-birth" are included, in this connection, puerperal fever, puerperal convulsions, and whatever causes of death that may have occurred as the direct result of child-birth, or parturition.

The number reported in 1892 was 75; 33 of which were from the immediate effects of child-birth, including metritis, hemorrhage, rupture of uterus, &c., 8 from puerperal convulsions, 24 from puerperal fever, 6 from septicæmia, and 4 from other causes.

Of the whole number, 28 were of native and 43 of foreign parentage.

The proportion of deaths from child-birth had largely decreased, during the last ten years previous to 1892, but in 1892 there was an increase of over 100 per cent.

On page 188 may be found the percentage of deaths from child-birth reported as such, and from puerperal fever to the whole number of deaths, and from the whole number of births, and showing also the locality.

The following Table will present the various relations in regard to the mortality from child-birth, for twenty-eight years, 1865–1892:

TABLE LXVIII.

Mortality in the State from Child-Birth, with the Percentage of the Whole Number of Deaths, Parentage, and Locality, for twenty-eight years, from 1865 to 1892, inclusive.

YEARS.	Number of Deaths from Child-Birth.	Per cent.	PARENTAGE.		DIVISIONS OF THE STATE.					
			Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1865-1869	145	1.00	59	86	7	8	12	58	51	9
1870-1874	230	1.19	101	126	6	15	17	77	96	19
1875	53	1.30	26	27	1	6	1	10	31	4
1876	48	1.24	21	27	3	......	1	18	23	3
1877	46	1.09	18	28	4	3	5	17	17	......
1878	43	1.01	23	20	2	4	3	9	21	4
1879	43	1 02	21	22	1	7	2	6	23	4
1875-1879	233	1.13	109	124	11	20	12	60	115	15
1880	51	1.11	23	28	4	4	3	10	27	3
1881	60	1.28	26	34	1	1	3	22	29	4
1882	50	1 03	18	32	......	5	1	16	27	1
1883	58	1.10	26	32	1	5	9	14	27	2
1884	47	.91	17	30	......	3	3	19	18	4
1880-1884	266	1.09	110	156	6	18	19	81	128	14
1885	47	.87	21	26	......	3	4	15	24	1
1886	41	.70	17	24	......	4	4	15	17	1
1887	53	.71	15	38	.....	5	4	18	26	......
1888	51	.77	13	38	......	3	......	25	20	3
1889	41	.65	14	27	1	5	2	16	13	4
1885-1889	233	.71	80	153	1	20	14	89	100	9
1890	41	.58	12	29	3	4	4	10	17	3
1891	32	.35	8	24	.....	3	.....	8	19	2
1892	75	1.01	28	43	2	11	3	18	27	10
Total, 28 years	1,255	1.00	510	741	36	99	81	401	553	81

* Not including Providence city.

	Whole number of Births, 1892.	Number of Deaths from Child-birth.	Percentage of Deaths from Child-birth to whole number of Births.	Whole number of Deaths from Puerperal Fever.	Percentage of Deaths from Puerperal Fever to the whole number of Births.	Whole number of Deaths in 1892.	Percentage of Deaths from Child-birth to the whole number of Deaths.	Percentage of Deaths from Puerperal Fever to the whole number of Deaths.
Bristol County	198	1	.51	1	.51	232	.43	.43
Kent County	665	5	.75	4	.60	598	.83	.67
Newport County Towns	190	1	.53	1	.53	187	.53	.53
Newport City	488	1	.20	......	....	404	.25	......
Providence County Towns	1,930	10	.52	5	.26	1,423	.65	.33
Pawtucket	726	2	.26	4	.55	642	.31	.62
Providence City	3,953	18	.45	11	.28	2,964	.61	.34
Woonsocket	718	2	.28	1	.14	445	.46	.23
Washington County	407	5	1.23	4	.98	368	1.36	1.08
Whole State	9,270	45	.49	30	.32	7,396	.61	.41

The percentage of deaths from *child-birth* to the number of *births* in the whole State was .49, while in Washington county the percentage was 1.23, and in Kent county .75.

The percentage of deaths from *puerperal fever* to the number of *births* in the whole State was .32, while in Washington county the percentage was .98, and in Kent county .60.

The percentage of deaths from *child-birth* to the number of *deaths* in the whole State was .61, while in Washington county the percentage was 1.36, and in Kent county .83.

The percentage of deaths from *puerperal fever* to the whole number of *deaths* in the whole State was .41, while in Washington county the percentage was 1.08, and in Kent county .67.

CHOLERA INFANTUM.

The number of deaths from cholera infantum, according to the returns for 1892, was 633.

Of the 633 decedents, 336 were males, and 297 were females.

Of parentage, 210 were of native, and 423 of foreign parentage; or about 201 of foreign to every 100 of native parentage.

The mortality from cholera infantum, during 1892, was about 16 per cent. more than during the year 1891.

As may be seen on the following page, the number of decedents from cholera infantum, during the twenty-eight years from 1865 to 1892, inclusive, was 8,173.

The proportion to total mortality, for the period of twenty-eight years was nearly 7 per cent. For 1889 the proportion was 6.8 per cent.; for 1890, 8.4 per cent.; for 1891, 8.2 per cent.; and for 1892, 8.5 per cent.

There were 109 males to every 100 females among the decedents during the twenty-eight years; and 144 decedents of foreign parentage to every 100 of native, during the same period.

The following Table shows the whole number of reported deaths from cholera infantum; the sex and parentage of the decedents; and the number in each of the larger divisions of the State, in each of the last twenty-eight years:

TABLE LXIX.

Mortality in the State from Cholera Infantum, 1865 to 1892, inclusive.

YEARS.	Number of Deaths.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
		Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 yrs., 1865-1869.	677	360	317	318	359	41	36	47	224	281	48
1870	213	106	107	95	118	15	15	13	69	93	8
1871	172	85	87	82	90	14	12	12	59	62	13
1872	391	195	196	167	224	16	16	21	157	151	30
1873	285	148	137	165	120	17	14	16	120	99	19
1874	265	140	125	115	150	4	12	5	84	134	26
1870-1874	1,326	674	652	624	702	66	69	67	489	539	96
1875	318	156	162	155	163	20	16	20	108	136	18
1876	250	131	119	105	145	5	12	29	68	124	12
1877	259	139	120	96	163	12	13	9	96	122	7
1878	168	96	72	73	95	7	14	7	64	71	5
1879	161	88	73	71	90	8	16	21	51	59	6
1875-1879	1,156	610	546	500	656	52	71	86	387	512	48
1880	247	123	124	109	138	13	11	10	93	100	20
1881	240	130	110	102	138	10	22	14	75	102	17
1882	325	173	152	133	192	20	11	19	132	130	13
1883	242	124	118	104	138	12	7	22	88	108	5
1884	325	177	148	139	186	10	12	26	114	144	19
1880-1884	1,379	727	652	587	792	65	63	91	502	584	74
1885	279	150	129	128	151	5	23	16	133	86	16
1886	377	179	198	148	234	4	29	15	194	120	15
1887	355	200	155	145	210	16	16	35	160	119	9
1888	467	239	228	184	283	18	35	28	219	149	18
1889	396	209	187	132	264	18	32	20	199	116	11
1885-1889	1,874	977	897	732	1,142	61	135	114	905	590	69
1890	582	282	300	202	380	19	57	33	245	209	19
1891	546	298	248	170	376	21	68	50	255	137	15
1892	633	336	297	210	423	18	77	43	281	201	13
Total, 28 years	8,173	4,264	3,909	3,343	4,830	343	576	531	3,288	3,053	382

---

* Not including Providence City.

CONSUMPTION.

The decedents from consumption, during 1892, numbered 759. The number is 19 more than in the preceding year.

Sex.—Of these 759 decedents 360 were males, and 399 were females; being about 110 female decedents to every 100 male decedents.

For the period of twenty years (1865–1884), there were one hundred and twenty or more females to every 100 male decedents from consumption, and a very considerable excess every year since, excepting 1890 and 1891.

Parentage.—There were 249 decedents of native parentage, and 510 of foreign; a proportion of 205 of foreign parentage to every 100 of native.

Season.—The largest number of deaths in any one month, 84, occurred in January; the next largest, 75, in May; the smallest number, 51, in October.

The number in each quarter of the year was as follows:

First Quarter	202	Third Quarter	188
Second Quarter	202	Fourth Quarter	167
	—		—
First half	404	Last half	355
Whole number	759		

There was more uniformity of the number of deaths in each quarter of the year than in the preceding year.

Ages.—During 1892, of the 759 decedents from consumption, 231, or more than one-third, were between the ages of 20 and 30; and 169, or more than one-fourth, were between the ages of 30 and 40.

In order to show more concisely the relation of age to mortality from consumption, during 1892, the following age periods and numbers are presented:

Under 10 years of age	43
Between 10 and 20 years	89
Between 20 and 30 years	231
Between 30 and 40 years	169
Between 40 and 50 years	96
Between 50 and 70 years	108
Over 70 years	23
Total	759

The following Table shows the total deaths from all reported *known causes*, with the *number* and *percentage* of deaths from consumption of the same, in each of the larger divisions of the State, and in the whole State, *in each* of *the last seventeen years*; and also the aggregate for a period of thirty years, from 1860 to 1889, inclusive:

CONSUMPTION.

STATISTICS BY COUNTIES.

NUMBER AND PERCENTAGE,

THIRTY-TWO YEARS.

TABLE LXX.—CONSUMPTION.—*Number, Locality and Percentage.*

COUNTIES.	1876.	1877	1878.	1879.	1880.	1881.	1882.	1883.	1884	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.	Total 30 years, 1860–1889.
BRISTOL COUNTY.																		
Total deaths, stated causes	148	201	187	141	209	203	183	197	199	185	221	217	251	208	253	239	232	5,217
Consumption....	19	27	23	16	19	25	36	19	21	12	23	20	28	20	31	17	29	646
Percentage..............	12.83	13.43	12.30	11.35	9.09	12.31	19.68	9.64	10.50	6.48	10.35	9.22	11.15	9.62	11.85	7.11	12.50	12.19
KENT COUNTY.																		
Total deaths, stated causes.	209	251	249	277	293	313	288	283	268	355	385	343	408	454	470	500	598	8,151
Consumption	28	42	41	38	45	36	51	39	37	45	43	34	55	45	38	47	51	1,300
Percentage...............	13.39	16.73	16.47	13.72	15.35	11.20	17.71	13.78	13.43	12.70	11.20	9.91	13.44	9.84	8.08	9.40	8.53	15.94
NEWPORT COUNTY.																		
Total deaths, stated causes.	280	243	265	330	324	346	378	401	403	408	433	435	458	440	470	597	591	10,043
Consumption......	45	33	31	45	34	51	46	55	43	47	57	41	32	37	51	51	45	1,300
Percentage...............	16.07	13.58	11.69	13.64	10.40	14.74	12.17	13.72	10.67	11.52	13.16	9.19	7.00	8.41	10.85	8.54	7.78	13.04
PROVIDENCE COUNTY.*																		
Total deaths, stated causes.	1,110	1,301	1,308	1,233	1,437	1,451	1,509	1,656	1,723	1,918	2,087	2,345	2,465	2,286	2,374	2,344	2,643	39,262
Consumption	211	222	229	197	189	220	224	257	248	273	276	246	273	257	305	236	265	6,124
Percentage....	19.01	15.96	17.51	15.98	15.35	15.16	14.82	15.52	14.13	14.20	13.05	10.49	11.07	11.24	12.84	10.00	10.03	15.59

* Not including Providence city.

TABLE LXX.—CONSUMPTION.—*Number. Locality and Percentage.*—Continued.

COUNTIES.	1876.	1877.	1878.	1879.	1880.	1881.	1882	1883.	1884.	1885.	1886.	1887.	1888.	1889	1890	1891.	1892.	Total 30 years, 1860-1889.
PROVIDENCE CITY.																		
Total deaths, stated causes.	1,850	1,932	1,973	2,017	2,063	2,130	2,230	2,351	2,227	2,157	2,341	2,630	2,644	2,495	2,859	2,615	2,964	51,462
Consumption	284	294	305	293	322	344	351	364	344	348	368	323	362	315	394	347	342	8,090
Percentage....	15.35	15.22	15.46	14.53	15.60	16.15	15.73	15.48	15 43	16.10	15.65	12.23	13.66	12.55	13.69	13.19	11.54	15 71
WASHINGTON COUNTY.																		
Total deaths, stated causes.	306	240	249	220	270	226	215	208	279	307	331	351	368	337	316	307	368	7,405
Consumption...........	68	43	47	48	33	30	29	32	46	56	59	46	50	53	33	42	27	1,296
Percentage.......	22.22	17.91	18.88	21.82	12.22	13.27	13.49	15.40	16.28	17.93	17.52	13 10	13.58	15.68	10 38	13.61	7 34	17.48
WHOLE STATE.																		
Total deaths, stated causes.	3,903	4,258	4,231	4 218	4,596	4,669	4,804	5,096	5,099	5,330	5,798	6,321	6,594	6,220	6 891	6,586	7,396	121,740
Consumption	655	661	676	637	642	706	737	766	739	781	826	710	800	727	852	740	759	18,755
Percentage.	16.78	15.52	15.98	15.10	14.01	15.12	15.33	15.03	14.34	14 42	14 12	11.19	12.13	11.61	12.29	11.18	10.26	15.38

TABLE LXXI.

Mortality in the State from Consumption, with the Percentage of the Whole Number of Deaths from all Causes, and the Sex, Parentage and Locality, in the Aggregate of Different Periods, 1865–1892.

YEARS.	Total Deaths from Consumption.	Per cent.	SEX.		PARENTAGE.		STATE DIVISIONS.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1865–1869	2,690	17.29	1,244	1,446	1,575	1,115	116	226	233	909	1,004	202
1870–1874	2,808	14.43	1,217	1,591	1,507	1,301	99	216	159	924	1,175	170
1875–1879	3,279	15.04	1,436	1,843	1,499	1,780	106	192	195	1,060	1,473	253
1880–1884	3,590	14.16	1,597	1,993	1,399	2,191	120	208	229	1,138	1,725	170
1885....	781	14.49	382	399	315	466	12	45	47	273	348	56
1886....	826	14.12	382	444	308	518	23	43	57	276	368	59
1887...	710	11.19	312	398	266	444	20	34	41	246	323	46
1888	800	12.13	391	409	284	516	28	55	32	273	362	50
1889	727	11.61	356	371	239	488	20	45	37	257	315	53
1885–1889...	3,844	12.63	1,823	2,021	1,412	2,432	103	222	214	1,325	1,716	264
1890....	852	12 29	422	430	280	572	31	38	51	305	394	33
1891....	740	11.18	380	360	248	492	17	47	51	236	347	42
1892	759	10.26	360	399	249	510	29	51	45	265	342	27
Total, 28 years ..	18,562	13.94	8,479	10,083	8,169	10,393	621	1,200	1,177	6,162	8,176	1,226

CONSUMPTION. *Proportion of Deaths to Population.*

The proportion of deaths from consumption to the *population* in the different localities in the State, during the last eight years, may be seen in the following summaries:

---

* Providence city not included.

For five years, 1885 *to* 1889, *inclusive.*

	Persons, One Death to every		In every 1,000 of Population.
Bristol County	609	or	1.64
Kent County	513	or	1.93
Newport County	717	or	1 40
Providence County*	412	or	2.43
Providence City	357	or	2.61
Washington County	435	or	2.30
Whole State	400	or	2 51

1890.

	Persons, One Death to every		In every 1,000 of Population.
Bristol County	368	or	2.71
Kent County	764	or	1.42
Newport County	560	or	1.78
Providence County Towns	333	or	3.00
Pawtucket	486	or	2.14
Providence City	335	or	3.00
Woonsocket	285	or	3.50
Washington County	716	or	1.40
Whole State	410	or	2.41

1891.

	Persons, One Death to every		In every 1,000 of Population.
Bristol County	684	or	1.46
Kent County	592	or	1.69
Newport County	572	or	1.74
Providence County Towns	575	or	1.73
Pawtucket	572	or	1.74
Providence City	389	or	2.57
Woonsocket	400	or	2.50
Washington County	583	or	1.71
Whole State	484	or	2.06

---

* Not including Providence city.

1892.

	Persons, One death to every		In every 1,000 of Population.
Bristol County	400	or	2.50
Kent County	566	or	1.76
Newport County	652	or	1.53
Providence County Towns	472	or	2.12
Pawtucket	581	or	1.72
Providence City	413	or	2.42
Woonsocket	447	or	2.23
Washington County	895	or	1.12
Whole State	484	or	2.07

In Bristol county the increase was nearly 50 per centum.

A small increase was returned in Providence and Kent counties, and decrease in Newport and Washington counties. The mortality was the same in 1892 as in 1891 in proportion to the population.

CROUP.

There were 89 decedents from croup, in 1892, as against 67 in 1891.

Sex.—Of the 89 decedents from croup, in 1892, there were 52 males and 37 females, a proportion of 141 males to each 100 females, which is in accordance with the rule of previous years, in which there has been a preponderance of males.

Parentage.—There were 44 decedents of native parentage, and 45 of foreign parentage. The proportions were in the ratio of 102 of foreign to each 100 of native parentage.

Age.—There were 12 of the decedents under one year of age, 20 of one year and under two, 36 of two years and under five, 19 between five and ten, 1 between fifteen and twenty, 1 between sixty and seventy.

Season.—

First Quarter	38	Third Quarter	6
Second Quarter	15	Fourth Quarter	30
First half	53	Last half	36
Whole Year	89		

The following Table will exhibit various facts in relation to mortality from croup, for twenty-eight years:

TABLE LXXII.

Mortality in the State from Croup, from 1865 to 1892, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County*.	Providence City.	Washington County.
1865-1869.......	268	1.73	127	141	103	165	22	14	20	102	101	9
1870-1874......	324	1.66	174	150	146	178	12	30	10	125	140	7
1875..........	96	2.33	53	43	43	53	1	3	4	26	56	6
1876...........	102	2.61	50	52	42	60	1	6	....	26	65	4
1877...........	95	2.23	48	47	34	61	4	3	1	47	40	.....
1878..........	93	2.20	45	48	43	50	14	3	7	25	39	5
1879..........	96	2.28	58	38	40	56	3	6	15	25	43	4
1875-1879.......	482	2.21	254	228	202	280	23	21	27	149	213	19
1880.........	66	1.45	32	34	27	39	3	3	4	20	30	6
1881...........	101	2.16	45	56	38	63	2	6	4	38	49	2
1882..........	77	1.60	41	36	32	45	1	2	6	33	32	3
1883..........	71	1.40	32	39	33	38	1	6	4	25	35	...
1884..........	80	1.55	40	40	32	48	2	11	4	29	34	.....
1880-1884.......	395	1.56	190	205	162	233	9	28	22	145	180	11
1885..........	94	1.74	45	49	42	52	4	8	6	46	28	2
1886..........	90	1.53	45	45	39	51	2	18	12	24	32	2
1887........	113	1.79	58	55	43	70	9	12	4	43	39	6
1888........	79	1.19	43	36	34	45	4	2	7	34	27	5
1889.........	80	1.28	37	43	24	56	3	15	1	27	33	1
1885-1889......	456	1.50	228	228	182	274	22	55	30	171	159	16
1890...........	83	1.19	53	30	28	55	2	14	2	32	31	2
1891..........	67	1.46	40	27	17	50	1	11	11	27	16	1
1892...........	89	1.20	52	37	44	45	1	10	21	21	33	3
Total, 28 years	2,164	1.59	1,118	1,046	887	1,280	92	183	143	775	903	68

* Not including Providence city.

DIARRHŒA AND DYSENTERY.

There were 199 decedents from diarrhœa and dysentery, in 1892.

Sex.—Of the 199, 100 were males, and 99 were females, or a nearly equal proportion.

Parentage.—There were, of the 199 decedents, 82 of native parentage, and 117 of foreign parentage, or a proportion of about 143 of foreign parentage to every 100 of native.

Age.—There were 103 of the decedents from diarrhœa and dysentery under 5 years of age, and there were 76 over 50 years of age, leaving 20 for all the 45 years between 5 and 50.

Locality.—Of the 199 decedents, 165 were in Providence county, and 8 in Newport county. Fourteen were reported from Kent county, six from Washington county, and six from Bristol county.

Season.—There were 120 of the deaths from diarrhœa and dysentery that occurred during the months of July, August and September.

The increase in mortality from diarrhœa and dysentery, in 1892, compared with the previous year, was over 39 per cent.

The following Table will show the deaths from diarrhœa and dysentery, with the percentage, sex, parentage, etc., for each of twenty-eight years, beginning with 1865 :

TABLE LXXIII.

Mortality in the State from Diarrhœa and Dysentery, 1865 to 1892, inclusive.

YEARS.	Total Deaths.	Per cent.	SEX.		PARENTAGE		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 yrs., 1865-1869	839	5.39	429	410	410	429	35	63	103	264	312	62
1870-1874.......	576	2.96	317	259	291	285	18	47	31	187	276	11
1875	106	2.16	60	46	60	46	9	6	1	34	51	5
1876	122	2.96	66	56	52	70	3	6	2	41	65	5
1877	142	3.19	64	78	73	69	8	6	9	54	55	10
1878	93	2.09	42	51	51	42	5	8	2	34	39	5
1879	97	2.17	48	49	47	50	9	6	10	27	42	3
1875-1879......	560	2.57	280	280	283	277	34	32	24	190	252	28
1880	98	2.03	49	49	50	48	4	6	10	32	42	4
1881	119	2.37	56	63	54	65	2	4	3	47	57	6
1882	158	3.11	75	83	69	89	2	4	28	57	64	3
1883	182	3.45	86	96	88	94	7	7	16	74	75	3
1884	153	2.98	74	79	69	84	10	5	11	66	56	5
1880-1884... . .	710	2.80	340	370	330	380	25	26	68	276	294	21
1885	120	2.23	61	59	51	69	7	6	6	62	35	4
1886	159	2.72	64	95	70	89	7	11	1	73	59	8
1887	199	3.11	107	92	70	129	6	16	4	92	72	9
1888	157	2.31	69	88	97	60	6	8	3	51	74	15
1889	159	2.51	73	86	67	92	1	12	17	71	50	8
1885-1889.....	794	2.61	374	420	355	439	27	53	31	352	287	44
1890	182	2.62	84	98	74	108	5	9	22	77	63	6
1891	143	2.16	69	74	51	92	4	15	13	48	58	5
1892	199	2.69	100	99	82	117	6	11	8	76	89	6
Total, 28 years.	4,003	3.09	1,993	2,010	1,876	2,127	154	259	303	1,470	1,631	186

---

* Not including Providence City.

DIPHTHERIA.

The number of deaths from diphtheria, in 1892, was 89, which was 13 less than in 1891, or a decrease of about 12 per cent.

Sex.—Of the 89 decedents, 48 were males, and 41 were females. As a rule there is a considerable preponderance of females.

Parentage.—There were 44 of native, and 45 of foreign parentage, a nearly equal proportion.

Season.—There were 28 deaths from diphtheria in the first quarter, 25 in the second quarter, 14 in the third quarter, and 22 in the fourth quarter.

Age.—There were 43 deaths under five years of age, 26 between five and ten, 13 between ten and fifteen, none between fifteen and twenty, and 7 above twenty years of age.

Locality.—Of the 89 decedents, 62 were in Providence county; 1 in Kent county; 1 in Bristol county; 8 in Newport county; and 17 in Washington county.

The following Table shows the mortality in the State from diphtheria, for twenty-eight years, beginning with 1865, also the percentage of deaths, the sex, parentage, etc.:

TABLE LXXIV.

Mortality in the State from Diphtheria—1865–1892.

YEARS	Whole Number of Deaths, All Causes.	Number of Deaths Diphtheria.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
				Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1865-'69	15,558	230	1 48	107	123	147	83	13	30	33	55	50	49
1870-'74	19,461	242	1.24	118	124	154	88	3	40	20	50	101	28
1875 ...	4,317	33	.80	17	16	18	15	1	4	3	8	14	3
1876 ...	4,116	159	3.86	77	82	69	90	1	2	9	29	111	7
1877 ...	4,450	492	11.56	239	253	233	259	12	44	2	122	295	17
1878 ...	4,441	435	9.80	224	211	201	234	21	29	23	106	245	11
1879....	4,472	259	5 79	121	138	143	116	7	19	20	95	106	12
1875-'79	21,796	1,378	6.33	678	700	664	714	42	98	57	360	771	50
1880 ..	4,829	152	3.40	73	79	75	77	3	6	2	63	61	17
1881...	5,016	216	4.63	106	110	118	98	10	16	8	53	116	13
1882....	5,074	101	1.99	48	53	55	46	......	3	4	29	48	17
1883 ...	5,282	95	1.88	39	56	45	50	1	7	3	26	54	4
1884....	5,141	119	2 31	65	54	47	72	8	1	9	39	58	4
1880-'84	25,342	683	2 66	331	352	310	343	22	33	26	210	337	55
1885....	5,389	99	1.83	47	52	48	51	5	5	6	71	37	7
1886 ...	5,849	228	3.90	98	130	101	127	20	21	23	64	98	2
1887..	6,340	287	4.53	135	152	101	186	15	11	4	114	108	35
1888....	6,594	191	2 86	87	104	79	112	13	3	9	58	98	10
1889 ...	6,259	184	2.93	80	104	89	95	3	10	11	56	97	7
1885-'89	30,431	987	3.25	447	512	418	571	56	50	53	331	438	61
1890 ...	6,931	211	3.04	112	99	93	118	1	9	16	86	94	5
1891....	6,620	102	1.50	52	50	48	54	2	7	6	40	47	......
1892....	7,396	89	1.20	48	41	41	45	1	1	8	23	39	17
Total, 28 yrs.	133,538	3,924	2.94	1,893	2,031	1,908	2,016	140	268	219	1,155	1,877	265

* Not including Providence city.

FEVER, MALARIAL.

The number of deaths, during 1892, from diseases classed as fever malarial, was 36. The number in 1891 was 31; in 1890, 42; in 1889, 40; in 1888, 71; in 1887, 85; in 1886, 43; in 1885, 30; in 1884, 25.

Sex.—Of the 36 decedents from malarial fevers, in 1892, 18 were males and 18 were females, or 100 males to every 100 females.

Parentage.—There were, of the 36 decedents from malarial diseases, 13 of native parentage, and 23 of foreign, or 177 of foreign parentage to every 100 of native.

Season.—The deaths from malarial diseases occurred in the different seasons of the year as follows:

First Quarter	3	Third Quarter	17
Second Quarter	7	Fourth Quarter	9
First half	10	Last half	26
Whole number	36		

Age.—The number of decedents in the different periods of life was as follows:

Under 5 years of age	3
From 5 to 20 years of age	6
From 20 to 40 years of age	9
From 40 to 60 years of age	7
60 and over	11
	36

Localities.—Bristol county, 0; Kent county, 4; Newport county, 2; Providence county, 30; Washington county, 0.

FEVERS, TYPHOID, ETC.

The number of decedents, whose deaths were returned as having been caused by "fever" of some form, not malarial nor cerebro-spinal, was 139. Deaths from puerperal fever are not included.

The term "fever" includes the several types of febrile diseases, as may be seen in Table VII, on page 23: "fevers unspecified," 6; "typhoid," 133.

The following Table exhibits, for each of the last twenty-eight years, the number and the percentage, and the sex and parentage of the decedents from fevers returned as from gastric and typhoid, and the number in each division of the State:

TABLE LXXV.

Mortality in the State from Fevers, Typhoid, etc.—1865 to 1892, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 yrs , 1865-1869	683	4.4	345	338	451	232	35	44	79	250	211	64
1870-1874.......	746	3.8	343	403	409	337	16	50	42	271	279	88
1875	147	3.4	73	74	90	57	1	4	6	49	69	18
1876	126	3.0	65	61	71	55	5	9	13	44	33	22
1877....	134	3 0	63	71	65	69	8	10	8	52	44	12
1878......... ..	150	3.4	68	82	77	73	13	13	6	59	47	12
1879	114	2.7	47	67	63	51	4	13	6	44	40	7
1875-1879.......	671	3.1	316	355	366	305	31	49	39	248	233	71
1880	158	3.4	74	84	94	64	8	12	5	66	52	15
1881	143	2.8	74	69	74	69	4	13	14	58	41	13
1882	229	4.7	111	118	100	129	6	11	5	56	145	6
1883...........	258	4.8	146	112	117	141	9	16	10	82	134	7
1884	165	3.2	83	82	78	87	7	7	12	66	64	9
1880-1884.......	953	3 7	488	465	463	490	34	59	46	328	436	50
1885	158	2.9	71	87	70	88	6	14	8	69	53	8
1886	169	2.9	78	91	76	93	6	8	11	66	70	8
1887............	127	2.0	67	60	58	69	2	14	9	49	38	15
1888............	235	3 6	125	110	88	147	20	24	14	66	102	9
1889...........	143	2.3	85	58	56	87	2	17	9	46	60	9
1885-1889.......	832	2.7	426	406	348	484	36	77	51	296	323	49
1890	107	1.5	58	49	39	68	7	8	5	37	43	7
1891	149	2.2	86	63	56	93	5	8	17	46	63	10
1892	133	1.8	75	58	55	78	5	12	9	49	51	7
Total, 28 years.	4 274	3.2	2,137	2,137	2,187	2,087	169	307	288	1,525	1,639	346

* Not including Providence City.

During 1892, of the 133 decedents from typhoid fever, there were 75 males and 58 females, a proportion of about 129 males to every one hundred females. The difference in the sexes of the mortality from fevers is not usually very great.

During the period of twenty-five years, 1865 to 1889, inclusive, the proportions of the sexes of the decedents from "fever," in the State, were 102 females to every 100 males.

Parentage.—There were 55 decedents from enteric fever, of native parentage, in 1892, and 78 of foreign parentage, a proportion of about 59 of foreign and 41 of native in every 100 decedents.

Season.—

First Quarter	30	Third Quarter	43
Second Quarter	20	Fourth Quarter	40
	—		—
First half	50	Last half	83
Whole Year	133		

The following Table shows the number of decedents from fevers, *in each division of ages*, in each of the last twenty-eight years, in the State of Rhode Island:

TABLE LXXVI.

Mortality from Typhoid Fever in Age Periods.

TYPHOID FEVER.	PERIODS OF LIFE.										
YEARS.	Under 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	Not stated.
1865	35	18	46	54	30	14	18	7	5	2	....
1866	23	10	21	26	21	16	9	14	10	....	....
1867	17	6	24	33	12	11	8	4	2	2	1
1868	10	7	10	21	8	8	10	4	5	....	....
1869	10	8	14	28	9	7	9	8	6	2	....
1870	15	13	28	39	16	20	7	7	6	1	...
1871	13	10	20	28	18	16	9	4	5	2	....
1872	17	18	31	54	20	9	12	11	3	1	...
1873	27	12	34	31	25	13	13	7	8	2	....
1874	10	14	26	32	9	5	10	3	6	2	....
1875	23	14	19	43	18	10	10	6	4	....	.
1876	21	10	15	24	14	9	6	16	6	3	2
1877	22	13	13	36	20	8	5	7	2	2	1
1878	17	16	27	47	13	11	12	2	3	2	....
1879	19	7	14	26	15	6	3	12	8	3	1
1880	25	12	24	43	23	12	10	5	3	...	1
1881	25	9	19	27	14	11	9	12	11	4	....
1882	21	22	41	69	27	14	9	10	9	1	...
1883	36	25	46	75	31	12	11	10	8	2	2
1884	24	13	19	47	22	9	12	10	5	3	1
1885	35	12	16	25	26	11	11	12	6	4	....
1886	29	9	25	41	20	14	17	8	5	1	...
1887	24	8	16	31	16	10	5	8	4	4	1
1888	27	27	42	75	29	16	12	3	4	...	...
1889	18	12	29	41	18	8	9	5	3	....	
1890	13	11	13	35	14	5	6	6	4	...	....
1891	12	10	25	50	26	10	7	6	2	...	1
1892	10	11	18	12	20	15	10	6	1	..	...
Total, 28 years	579	357	680	1133	534	310	269	213	144	43	11

TABLE LXXVII.

Comparative Exhibit of the Percentage of Deaths from Typhoid Fever to Total Deaths from Specified Causes, in Five New England States, for seventeen years, 1876 to 1892.

	1876	1877	1878	1879	1880	1881	1882	1883	1884	1885	1886	1887	1888	1889	1890	1891	1892
Rhode Island......	3.0	3.0	3.1	2.7	3.4	2.8	4.7	4.8	3.2	2.9	2.9	2.0	3.6	2.2	1.5	2.2	1.8
Massachusetts.....	2.7	2.7	2.3	1.9	2.5	2.9	2.9	2.3	2.4	2.0	2.1	2.3	2.2	2.2	1.9	1.8	1.7
Connecticut.......	3.6	3.3	2.7	1.8	2.5	2.5	3.1	2.1	2.5	1.1	2.2	1.2	2.2	2.2	2.3	2.3	....
New Hampshire...	....	....	....	....	....	...	...	...	2.2	2.2	3.0	2.1	2.2	2.4	1.9	...	....
Vermont..........	4.2	4.8	3.4	2.7	3.5	5.5	3.4	3.1	3.0	2.2	2.5	2.5	2.2	2.7	1.6	1.6	...

DISEASES OF THE HEART.

The number of decedents from the various forms of diseases of the heart, as reported in 1892, was 506. The number is 26 more than that of 1891.

Sex.—There were 260 male decedents, and 246 female decedents; a proportion of about 105 males to every 100 females, but these proportions, although varying from year to year, are not greatly different.

Parentage.—Of the 506 decedents from diseases of the heart, in 1892, there were 252 of native parentage, and 254 of foreign, a proportion of about 99 of native parentage to every 100 of foreign. Until this year it has been the invariable rule of the whole period of registration, that the native population is more subject to heart diseases than the foreign.

The following Table exhibits for each of the last twenty-eight years, 1865 to 1892, inclusive, the number and percentage, and the sex and parentage of the decedents from diseases of the heart, and the number of the same in each division of the State:

TABLE LXXVIII.

Mortality from Diseases of the Heart, 1865 to 1892, inclusive.

YEARS.	Total Number.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1865-1869....	571	3.67	309	262	394	177	21	43	18	176	250	30
1870-1874	853	4.38	451	402	559	294	23	43	68	234	436	49
1875	186	4.31	84	102	113	73	2	13	22	49	88	12
1876	166	4.03	86	80	109	57	9	11	10	38	86	12
1877	182	4.09	94	88	110	72	3	7	9	57	93	13
1878	166	3.73	88	78	109	57	5	11	15	38	83	14
1879...........	202	4.78	114	88	127	75	8	20	16	38	111	9
1875-1879.......	902	4.11	466	436	568	334	27	62	72	220	461	60
1880	231	5.03	125	106	146	85	9	21	29	59	104	9
1881	264	5.65	131	133	154	110	9	21	24	73	121	16
1882	255	5.31	116	139	162	93	8	16	23	55	142	11
1883	325	6.20	167	158	179	146	8	27	30	70	172	18
1884	285	5.60	135	150	163	122	6	16	25	87	139	12
1880-1884	1,360	5.36	674	686	804	556	40	101	131	344	678	66
1885	349	6.48	162	187	198	151	13	27	25	94	159	31
1886	330	5.20	152	178	184	146	12	20	18	82	168	30
1887...	406	6.40	205	201	240	166	7	21	36	123	193	26
1888....	436	6.56	196	240	240	196	11	22	40	122	210	31
1889	460	7.35	233	227	258	202	19	31	39	143	199	29
1885-1889 ..	1,981	6.51	948	1,033	1,120	861	62	121	158	564	929	147
1890...........	405	5.84	222	183	219	186	15	49	27	114	172	28
1891	480	7.25	248	232	244	236	21	37	38	137	210	37
1892	506	6.81	260	246	252	254	22	47	48	163	200	26
Total, 28 years	7,058	6.49	3,578	3,480	4,160	2,898	234	503	590	1,952	3,336	443

---

* Not including Providence city.

Sex.—Of the 7,058 persons deceased from diseases of the heart, in the last twenty-eight years, 3,578 were males, and 3,480 were females; or 103 males to each 100 females.

Parentage.—Of the 7,058 decedents, during twenty-eight years, 4,160 were of native parentage, and 2,898 of foreign. The proportions would, therefore, stand as follows: To every 100 of foreign parentage there were about 143 of native; or about 59 native and 41 of foreign parentage in every 100 deaths. This difference has been gradually diminishing. In 1892 there were two more deaths of foreign than of native parentage.

The following Table shows the number of decedents from diseases of the heart, in each divisional period of life, in each of the last twenty-eight years:

TABLE LXXIX.

Mortality from Diseases of the Heart, in Age Periods.

YEARS.	Under 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	Not stated.
1865	14	4	6	7	22	17	19	9	...
1866	18	8	14	17	10	23	21	4	.....
1867	11	11	10	13	22	16	27	4	....
1868	15	5	13	11	14	28	25	5	.....
1869	21	4	14	18	20	22	21	7	1
1870	19	6	11	13	20	21	23	3	1
1871	9	12	10	19	23	36	28	6	1
1872	27	12	22	19	31	36	29	13	......
1873	19	11	28	18	25	35	42	9	2
1874	20	16	26	21	27	50	40	12	2
1875	14	16	25	20	32	29	41	9	......
1876	14	10	15	19	20	38	39	10	1
1877	15	11	20	18	27	45	33	13	.....
1878	16	8	18	16	26	36	35	11	......
1879	19	9	13	25	33	51	36	16	......
1880	15	10	18	23	38	49	49	28	1
1881	32	13	26	23	37	49	53	21	......
1882	22	17	24	25	36	51	61	17	2
1883	39	13	21	33	52	65	76	26	......
1884	15	25	21	32	45	61	50	32	4
1885	38	13	24	42	61	69	78	24	......
1886	39	18	28	38	52	68	69	18	......
1887	52	30	23	35	61	79	87	39	......
1888	39	25	30	51	84	97	74	33	....
1889	45	25	37	45	69	85	118	35	1
1890	34	15	21	53	69	78	96	36	.....
1891	40	18	45	41	85	109	101	38	3
1892	54	21	32	59	93	111	104	31	1
Total, 28 years	715	386	598	767	1,131	1,454	1,475	509	20

The results of twenty-eight years of registration, with record of ages of decedents from diseases of the heart, show in periods of twenty years each of life, the following percentages:

Under 20 years of age	10.1 per cent.
Between 20 and 40	14.0 per cent.
Between 40 and 60	26.9 per cent.
Between 60 and 80	41.5 per cent.
Over 80	7.2 per cent.
Not stated	.3 per cent.
	100.0 per cent.

It will be seen that more than 41 per cent. of all the deaths from diseases of the heart were of persons over sixty years of age, and under eighty.

Diseases of the heart have acquired large importance as a cause of death. From 30.0 in every 1,000 deaths from all causes, in 1865, heart diseases gradually increased to about 73 in every 1,000, in 1889, and falling back to slightly less than 60 per thousand in 1890, and rising to 72.5 per thousand in 1891, and falling to 68.4 in 1892.

INFLUENZA.

The event, during the first four months of the year 1890, of a very extraordinary and perhaps unprecedented prevalence of a form of influenza, which was unlike that of ordinary occurrence, in that it affected indiscriminately all the functions and nearly all the organs of the body varying with the individuals attacked, and the reappearance of the same, although in greatly lessened numbers, in 1891, warrants a continued notice not given previous to 1890, in the Registration Reports to the affection so named.

The disease was, in 1890, most largely confined to the respiratory passages, and resulted in a largely increased mortality from bronchitis and consumption. During 1891, the disease was equally as severe, affecting in a larger measure the brain and other nerve centres, and the direct mortality was even larger than that of 1890. The prevalence was largest during the second quarter of the year, and again in December.

There were 336 deaths reported, in 1892, as resulting from influenza. This was 159 more than in 1891, but of the 336 deaths in 1892, 198 died in January, 52 in February, 31 in March and 27 in April, or 308 in the first four months of the year, and represents the continuance of the epidemic occurring during the winter of 1891–1892.

Sex.—Of the 336, 142 were males and 194 were females, a proportion of 73 males to every 100 females.

Parentage.—The parent nativity of the decedents was 170 of native and 166 of foreign.

Season.—Of the 336 deaths from influenza, during 1892, 281 occurred in the first quarter of the year, 42 in the second, 5 in the third and 8 in the fourth quarter.

Age.—There were 46 under 5 years of age, 8 from 5 to 20 years, 32 from 20 to 40, 58 from 40 to 60, 148 from 60 to 80, and 44 from 80 years of age and over.

INSANITY.

There were 27 deaths from insanity, in 1892, an increase of 6 from 1891. The percentage to the whole number of deaths was a little more than one-third of one per cent. The percentage during the last three years has been less than the average of the twenty-five years preceding. These deaths occurred chiefly at the Cranston institutions, and in the Butler hospital.

Sex.—There were 17 male and 10 female decedents.

Parentage.—The number of native decedents from insanity was 15, and of foreign parentage 12.

The following Table shows the mortality in the State from insanity, for twenty-eight years, with percentage to deaths from all causes, sex, parentage, etc., from 1865 to 1892, inclusive:

TABLE LXXX.

Mortality in the State from Insanity.

YEARS.	Number of Deaths from Insanity.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1865-1869.......	74	.49	36	38	55	19	......	8	3	7	54	2
1870-1874.	92	.48	43	49	61	28	3	1	5	26	57	......
1875	32	.78	18	14	25	7	......	1	4	9	16	2
1876	12	.28	5	7	9	3	1	2	1	1	6	1
1877............	19	.49	9	10	9	10	......	1	......	5	12	1
1878............	22	.50	5	17	16	6	......	......	1	3	17	1
1879............	17	.40	11	6	10	7	......	......	......	5	11	1
1875-1879.......	102	.49	48	54	69	33	1	4	6	23	62	6
1880............	19	.39	9	10	13	6	......	1	2	6	9	1
1881....	32	.63	15	17	22	10	1	1	3	10	16	1
1882	23	.45	9	14	18	5	......	1	......	8	12	2
1883	29	.55	12	17	17	12	1	2	......	7	18	1
1884.......	36	.69	17	19	24	12	2	3	......	21	9	1
1880-1884.......	139	.54	62	77	94	45	4	8	5	52	64	6
1885............	35	.67	16	19	18	17	......	......	2	23	10	......
1886............	49	.83	21	28	28	21	3	1	1	37	7	......
1887............	64	1.01	35	29	33	31	1	......	1	56	......	6
1888............	43	.64	21	22	24	19	1	2	......	33	7	......
1889............	22	.35	14	8	12	10	......	......	......	14	8	......
1885-1889......	213	.70	107	106	115	98	5	3	4	163	32	6
1890............	30	.44	19	11	16	14	1	1	1	13	14	......
1891........ ...	21	.32	10	11	16	5	......	1	......	5	13	2
1892............	27	.37	17	10	15	12	3	1	......	8	14	1
Total, 28 years.	698	.53	342	356	444	254	17	27	24	297	310	23

* Not including Providence city.

DISEASES OF THE KIDNEYS.

There were 258 deaths returned, during 1892, with diseases of the kidneys assigned as the cause.

Sex.—Of the 258, there were 135 males and 123 females.

Parentage.—There were 127 of native parentage and 131 of foreign, or about 97 of native to every 100 of foreign parentage.

In 1890, it occurred for the first time in twenty-six years that the decedents from diseases of the kidneys, of foreign parentage, outnumbered those of native parentage.

Age.—Of the 258 decedents from kidney diseases 4 were under five years of age, 11 from five to twenty, 57 from twenty to forty, 86 from forty to sixty, 77 from sixty to eighty, and 23 eighty and over.

Diseases of the kidneys have largely increased in number, and much larger still in proportion, during the last twenty-eight years.

During the ten years from 1865 to 1874, inclusive, the proportion of deaths from kidney diseases, to whole number of deaths from all causes, was but little more than one per cent., while during the ten years from 1880 to 1889, inclusive, the proportion was nearly two and one-half per cent.

The following Table will present various facts in relation to the mortality from diseases of the kidneys, in Rhode Island, for twenty-eight years, 1865–1892 :

TABLE LXXXI.

Mortality in the State from Kidney Diseases, with the Percentage of the Whole Number of Deaths, Sex, Parentage and Locality, for twenty-eight years, from 1865 to 1892, inclusive.

YEARS.	Number of Deaths from Kidney Diseases.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 yrs., 1865-1869	117	.76	83	34	80	37	6	4	19	23	57	8
1870-1874.......	261	1.34	154	107	162	99	11	14	19	56	144	17
1875	65	1.58	36	29	46	19	1	......	4	16	42	2
1876	50	1.28	22	28	32	18	1	1	7	10	28	3
1877....	67	1.57	40	27	35	32	2	1	......	14	49	1
1878	80	1.89	50	30	49	31	4	3	3	21	47	2
1879	79	1.88	51	28	44	35	1	3	1	23	43	8
1875-1879.......	341	1.56	199	142	206	135	9	8	15	84	209	16
1880............	91	2.02	52	39	51	40	1	5	10	27	46	2
1881	79	1.69	40	39	47	32	7	5	4	14	48	1
1882	86	1.79	50	36	45	41	2	5	10	15	52	2
1883	129	2.43	72	57	74	55	5	2	17	37	60	8
1884	118	2.29	53	65	66	52	5	11	12	28	54	8
1880-1884.......	503	1.98	267	236	283	220	20	28	53	121	260	21
1885	159	2.97	92	67	86	73	8	10	17	31	88	5
1886....	155	2.49	85	70	93	62	3	10	22	37	71	12
1887............	169	2.66	92	77	90	79	5	6	16	43	92	7
1888............	213	3.23	102	111	122	91	10	10	24	46	115	8
1889............	210	3.38	119	91	122	88	14	13	15	62	96	10
1885-1889.......	906	2.94	490	416	513	393	40	49	94	218	462	42
1890	229	3.20	116	113	109	120	15	8	21	59	116	10
1891...........	245	3.06	123	122	122	123	9	12	25	72	114	13
1892	258	3.49	135	123	127	131	9	11	24	70	128	16
Total, 28 years.	2,860	1.95	1,567	1,293	1,602	1,258	119	134	270	704	1,490	143

* Not including Providence City.

DISEASES OF THE LIVER.

There were 89 deaths reported, in 1892, as having been caused by structural diseases of the liver.

Of the 89 decedents there were 39 males and 50 females, or 78 males to every 100 females.

There were 34 of native parentage and 55 of foreign, or about 62 of native to every 100 of foreign.

Sixty-four or nearly three-fourths of the whole number were of persons of forty years of age and over.

In the age period of from five to forty, there were but seventeen decedents from diseases of the liver.

The mortality from such diseases does not depend to any marked extent upon the influence of season.

Table LXXXII will present various facts relating to diseases of the liver during 28 years.

Table LXXXII.

Percentage to Whole Number of Deaths, Sex, Parentage and Locality of Decedents from Diseases of the Liver, 1865–1892.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County	Providence County.*	Providence City.	Washington County.
1865-1869.	183	1.19	103	80	122	61	14	11	33	42	67	16
1870-1874.......	200	1.03	94	106	117	83	13	16	16	61	74	20
1875...........	47	1.09	26	21	19	28	5	2	3	10	26	1
1876...........	45	1.09	26	19	27	18	1	5	5	11	18	5
1877...........	52	1.17	23	29	31	21	1	.....	7	16	24	4
1878	49	1.10	25	24	32	17	8	1	6	14	18	2
1879...........	52	1.24	27	25	31	21	4	4	2	14	22	6
1875-1879.......	245	1.14	127	118	140	105	19	12	23	65	108	18
1880...........	58	1.27	29	29	40	18	4	3	8	15	25	3
1881...........	46	.92	30	16	21	25	2	2	6	8	24	4
1882...........	62	1.22	34	28	36	26	3	5	10	17	24	3
1883...........	51	.94	27	24	20	31	5	6	4	16	18	2
1884...........	48	.93	22	26	23	25	5	3	5	2	31	2
1880-1884.......	265	1.06	142	123	140	125	19	19	33	58	122	14
1885	61	1.13	24	37	32	29	2	6	6	21	24	2
1886...........	54	.92	29	25	26	28	4	4	4	14	28	......
1887...........	86	1.35	40	46	38	48	3	5	3	31	39	5
1888	68	1.03	38	30	36	32	1	5	6	28	26	2
1889...........	70	1.12	30	40	31	39	1	2	10	26	29	2
1885-1889.......	339	1.11	161	178	163	176	11	22	29	120	146	11
1890....	65	.94	42	23	29	36	3	4	6	21	26	5
1891...........	81	1.23	41	40	28	53	3	4	9	26	38	1
1892...........	89	1.20	39	50	34	55	3	5	4	27	45	5
Total, 28 years.	1,467	1.11	749	718	773	694	85	93	153	420	626	90

* Not including Providence City.

DROPSY.

During 1892 there were 39 deaths returned as having been caused by dropsy.

It has been repeatedly observed in previous reports that although this term is a misnomer in a large measure and conveys no definite idea of the pathological condition preceding the dropsical accumulation, it is, nevertheless, the only cause returned, and as it is in some instances the apparently immediate cause of death, it is given a place in the Registration Reports; and as a frequent result and concomitant of diseases of the kidneys and liver, it has been placed in comparison with them in the following Table.

Of the 39 decedents from dropsy, 17 were males and 22 were females.

The female decedents from dropsy are in nearly every year, in a considerable number, in excess of the male decedents.

Of the parentage, 24 were of native and 15 of foreign parentage.

An examination of Table LXXXIII will serve as evidence of the greater carefulness and better judgment of the medical practitioners of the present time, inasmuch as the causes of dropsy are now better understood and reported, and for that reason the number of deaths attributed to dropsy have diminished nearly fifty per cent.

TABLE LXXXIII.

Mortality from Kidney and Liver Diseases compared with Dropsy (so returned) for forty years—1853-1892.

YEARS.	DEATHS FROM KIDNEY DISEASES			DEATHS FROM LIVER DISEASES			TOTAL DEATHS FROM KIDNEY AND LIVER DISEASES.			DEATHS FROM DROPSY.			Excess or Diminution of Dropsy in reference to Kidney and Liver Diseases.	Per cent. of Deaths from Dropsy to all.
	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.		
1853-1857.	26	20	6	51	28	23	77	48	29	208	89	119	+131	2 21
1858-1862.	71	38	33	168	87	81	239	125	114	270	113	157	+31	2.07
1863-1867.	99	69	30	191	104	87	290	173	117	371	169	202	+81	2.10
1868-1872.	185	119	66	183	92	91	368	211	157	274	126	148	—94	1.62
1873-1877.	314	172	142	229	116	113	543	288	225	284	125	159	—259	1 32
1878......	81	51	30	49	25	24	130	76	54	38	21	17	—92	.86
1879	81	52	29	52	27	25	133	79	55	50	26	24	—83	1.12
1880......	91	52	39	58	29	29	149	81	68	37	15	22	—112	.77
1881......	79	40	39	46	30	16	125	70	55	47	23	24	—78	94
1882	88	47	41	62	34	28	150	81	69	50	22	28	—100	.99
1878-1882.	420	242	178	267	145	122	687	387	300	222	107	115	—465	.94
1883......	117	67	50	51	27	24	168	94	74	47	21	26	—121	.89
1884......	133	58	75	52	24	28	185	82	103	40	20	20	—145	.78
1885......	168	95	73	61	24	37	229	119	110	44	30	14	—185	.82
1886......	163	91	72	71	38	33	234	129	105	49	20	29	—185	.84
1887......	169	92	77	86	40	46	255	132	123	35	14	21	—220	.55
1883-1887.	750	403	347	321	153	168	1,071	556	515	215	105	110	—856	.78
1888......	213	102	111	68	38	30	281	140	141	48	18	30	—233	.73
1889......	210	119	91	70	30	40	280	149	131	42	14	28	—238	.60
1890......	229	116	113	65	42	23	294	158	136	46	18	28	—248	.67
1891......	245	123	122	81	41	40	326	164	162	35	8	27	—291	.52
1892	258	135	123	89	39	50	347	174	173	39	17	22	—308	.53
Totals. ..	3,020	1,658	1362	1,783	915	868	4,803	2,573	2,230	2,054	909	1,145	—2,749	.63

MEASLES.

There were 28 decedents from measles as a cause of death in 1892. The number is 16 more than in the preceding year, and about the annual average of the previous twenty-seven years.

Of the 28, there were 14 males and 14 females. The sexes seem to be nearly equally susceptible to measles and to mortality therefrom.

Of parentage there were 10 of native and 18 of foreign.

During the last ten years the proportion of mortality from measles has been about 69 of native to every 100 of foreign parentage.

During 1892, the number of decedents under five years of age was 27.

The number in the different divisions of the State may be found in Table LXXXIV.

Table LXXXIV.

Mortality in the State from Measles—1865 to 1892.

YEARS.	Total Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 yrs , 1865-1869	82	.54	38	44	20	62	6	4	12	34	26	......
1870-1874.......	126	.65	54	72	63	63	5	13	7	46	51	4
1875............	2	.05	1	1	......	2	.....	......	......	2	......	......
1876............	4	.10	......	4	1	3	......	......	......	4	......	... ..
1877	11	.25	3	8	2	9	......	... ..	1	8	2	......
1878............	81	1.82	39	42	25	56	2	3	......	26	50	......
1879............	... ..	......	......	......	......	......	......	......	......	......	......	......
1875-1879.......	98	.44	43	55	28	70	2	3	1	40	52	... ..
1880	9	.20	3	6	2	7	......	......	......	6	3	......
1881............	37	.74	17	20	15	22	......	1	2	9	25	......
1882............	6	.12	1	5	......	6	......	......	.....	2	4	......
1883............	14	.27	11	3	9	5	......	1	......	3	8	2
1884............	18	.35	10	8	5	13	1	6	1	3	7	......
1880-1884.......	84	.33	42	42	31	53	1	8	3	23	47	2
1885............	45	.84	27	18	19	26	......	7	2	27	8	1
1886............	18	.30	11	7	4	14	......	5	......	4	9	......
1887............	132	2.08	69	63	57	75	......	5	8	26	90	3
1888....	11	.22	5	6	3	8	... ..	2	......	7	2	......
1889............	29	.47	15	14	10	19	......	8	......	7	14	......
1885-1889	235	.77	127	108	93	142	......	27	10	71	123	4
1890............	92	1.32	45	47	42	50	2	10	......	41	31	8
1891............	12	.18	7	5	4	8	1	2	2	3	3	1
1892............	28	.38	14	14	10	18	......	2	4	11	11	......
Total, 28 years.	757	.56	370	387	291	466	17	69	39	269	341	19

---

* Not including Providence city.

OLD AGE.

The number of deaths, in 1892, attributed to old age as a cause, was 256.

This is a greater number than has been returned from that cause in any year since 1888, when the proportion to whole number of specified causes of death was 4.35 per centum, as against 3.46 in 1892.

Of the 256 decedents from old age, 95 were males and 161 were females, or about 59 males to every 100 females.

Of the parentage of the 256, there were 168 of native and 88 of foreign parentage, or nearly 200 of native to every 100 of foreign.

The following Table will present the statistics of deaths in Rhode Island from old age, for twenty-eight years:

TABLE LXXXV.

Mortality in the State from Old Age, with the Percentage of the Whole Number of Deaths, Sex, Parentage, and Locality, for twenty-eight years, from 1865 to 1892, inclusive.

YEARS.	Number of Deaths from Old Age.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1865-1869.......	946	6.53	349	597	728	218	49	91	157	262	269	118
1870-1874.......	1,146	6.32	451	695	838	308	62	104	152	322	340	166
1875............	216	5.25	93	123	150	66	9	23	33	69	59	23
1876............	241	6.18	107	134	177	64	12	14	38	65	71	41
1877............	213	5.00	96	117	145	68	12	23	29	57	63	29
1878............	222	5.25	84	138	172	50	15	8	32	76	61	30
1879............	220	5.22	82	138	152	68	14	19	26	69	67	25
1875-1879.......	1,112	5.38	462	650	796	316	62	87	158	336	321	148
1880............	273	5.95	121	152	186	87	12	20	34	90	73	44
1881............	247	5.29	101	146	167	80	12	24	36	93	72	10
1882............	283	5.89	110	173	190	93	20	25	40	106	79	13
1883............	275	5.22	105	170	184	91	17	18	44	91	84	21
1884............	293	5.68	101	192	196	97	16	20	39	106	86	26
1880-1884.......	1,371	5.60	538	833	923	448	77	107	193	486	394	114
1885............	267	4.95	86	181	183	84	9	32	47	87	70	22
1886............	276	4.69	101	175	181	95	16	24	36	100	73	27
1887............	278	4.38	103	175	167	111	17	19	29	109	76	28
1888............	290	4.35	108	182	198	92	16	26	25	124	64	35
1889............	227	3.63	75	152	136	91	10	23	23	73	71	27
1885-1889.......	1,338	4.40	473	865	865	473	68	124	160	493	354	139
1890............	198	2.87	72	126	123	75	16	19	19	59	63	22
1891............	185	2.80	83	102	121	64	18	16	26	65	41	19
1892............	256	3.46	95	161	168	88	9	24	29	91	71	32
Total, 28 years.	6,552	4.94	2,523	4,029	4,562	1,990	361	572	894	2,114	1,853	758

* Not including Providence city.

PERITONITIS.

There were 62 deaths which were caused by peritonitis, during 1892.

Sex.—Of the 62 decedents from peritonitis there were 24 males and 38 females, a proportion of nearly 158 females to every 100 males.

Parentage.—There were 24 of native parentage and 38 of foreign, or a ratio of 63 native to every 100 of foreign parentage.

Season.—The seasons do not as a rule have a notable influence in regard to the mortality from peritonitis.

PNEUMONIA.

There were 655 decedents from pneumonia, in 1892. The number is eighty-seven greater than in 1891.

The proportion to whole number of deaths was 8.8 per hundred.

Sex.—Of the 655 decedents from pneumonia, and including congestion of the lungs, 335 were males and 320 were females; or about 105 females to every 100 males.

Parentage.—By parentage there were 265 of native and 390 of foreign parentage. The proportion of decedents from pneumonia was about 68 of native to each 100 of foreign parentage.

Season.—There were 380, or about 58 per cent., of the deaths that occurred during the first four months of the year. The largest mortality by months was 146 in January, 84 in March, 76 in April, and 74 in February.

Pneumonia, as a cause of death, has increased in the ratio to whole number of deaths, during the last twenty-five years, from an average of 5.8 per cent., during the first ten years, to an average of 7.6 per cent. during the last ten previous to 1890.

The following Table presents, for each of the last twenty-eight years, the number and the percentage, with the sex and the parentage of the decedents from pneumonia; and the number in each year, in each division of the State:

TABLE LXXXVI.

Mortality in the State from Pneumonia, 1865 to 1892, inclusive.

YEARS.	Whole Number.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
5 yrs., 1865-1869	921	5.9	445	476	570	351	45	55	72	281	403	65
1870-1874.......	1,113	5.7	570	543	636	477	46	56	52	335	542	82
1875	400	9.3	199	201	243	157	14	27	25	105	198	31
1876	339	8.2	164	175	162	177	13	23	16	97	163	27
1877....	226	5.1	104	122	127	99	10	7	14	81	98	16
1878	317	7.1	143	174	176	141	10	11	18	110	140	28
1879	311	7.4	148	163	163	148	7	15	15	103	156	15
1875-1879.......	1,593	7.3	758	835	871	722	54	83	88	496	755	117
1880	364	7.9	180	184	177	187	26	16	18	92	192	20
1881	327	6.5	177	150	190	137	10	23	17	81	174	22
1882.......	344	7.2	178	166	163	181	10	22	24	91	176	21
1883	400	7.8	192	208	198	202	19	21	34	108	204	14
1884	363	7.1	167	196	192	171	10	13	17	125	172	26
1880-1884.......	1,798	7.1	894	904	920	878	75	95	110	497	918	103
1885	465	8.6	214	251	271	194	15	20	33	151	227	19
1886....	481	8.2	232	249	234	247	17	29	37	161	209	28
1887............	488	7.7	260	228	227	261	13	27	39	142	227	40
1888............	508	7.7	274	234	227	281	16	37	29	171	219	36
1889...........	483	7.7	255	228	213	270	18	37	29	169	208	22
1885-1889... ...	2,425	8.0	1,235	1,190	1,172	1,253	79	150	167	794	1,090	145
1890...........	569	8.2	288	281	247	322	16	36	30	206	246	35
1891	568	8.5	270	298	247	321	17	40	70	183	232	26
1892	655	8.8	335	320	265	390	18	57	52	216	277	35
Total, 28 years.	9,642	.72	4,795	4,847	4,928	4,714	350	572	641	3,008	4,463	608

* Not including Providence City.

TABLE LXXXVII.

Exhibiting the Number of Decedents from Pneumonia, in each of the several Periods of Life, during each of the last twenty-eight years, from 1865 to 1892, inclusive.

YEARS.	Under 5.	5 to 10.	10 to 15.	15 to 20.	20 to 30.	30 to 40.	40 to 50.	50 to 60.	60 to 70.	70 to 80.	80 and over.	Not stated.
1865	65	4	2	....	14	11	15	17	21	21	5	...
1866	57	4	4	5	12	10	14	21	25	32	9	...
1867	57	9	2	3	10	11	13	16	25	13	12	1
1868	70	4	3	3	15	8	16	13	19	27	13	...
1869	61	11	1	2	11	12	9	28	25	16	11	....
1870	84	6	5	4	6	7	8	14	20	19	8	1
1871	71	7	2	7	10	17	16	16	35	17	19	1
1872	83	5	1	7	17	20	19	22	21	19	11	1
1873	105	4	8	3	10	14	16	17	21	23	10	....
1874	76	9	4	6	17	17	25	21	40	27	8	...
1875	120	9	3	8	22	30	35	39	61	43	28	2
1876	116	5	4	3	20	20	32	35	48	39	17	....
1877	79	2	....	7	15	15	24	27	22	24	9	2
1878	115	9	4	10	14	17	28	20	42	45	13	....
1879	102	8	1	3	14	27	26	35	38	38	9	....
1880	95	18	3	16	14	33	37	46	47	43	12	...
1881	102	4	2	5	15	22	26	45	48	31	26	1
1882	71	3	4	14	22	36	49	33	41	46	21	4
1883	88	15	2	13	32	33	40	53	49	46	27	2
1884	103	14	5	11	23	31	24	32	53	37	23	4
1885	121	9	10	8	23	29	50	49	76	59	29	2
1886	111	10	7	19	32	35	50	58	74	55	30	....
1887	132	15	7	7	32	43	51	56	64	53	28	...
1888	103	20	5	15	49	48	61	62	70	54	21	....
1889	120	11	3	20	27	36	51	57	77	47	31	....
1890	161	7	10	12	46	55	55	55	79	51	33	2
1891	126	10	4	11	42	54	60	70	84	70	37	..
1892	139	10	9	10	39	69	75	74	110	71	44	5
Totals, 28 years	2,736	245	95	232	587	763	925	1,031	1,311	1,069	551	28

Age.—Of the decedents from pneumonia, during the period of twenty-eight years, 30 per cent. were under five years of age. Of over fifty years of age the number of decedents was about 50 per cent. of the whole number.

The following summary will present the percentages for 1892 in round numbers:

Under five years of age	21 per cent.
Five years and under twenty, and not stated	5 per cent.
Twenty years and under fifty	28 per cent.
Fifty years and over	46 per cent.

SCARLATINA.

The number of deaths returned as having been caused by scarlatina, in 1892, was 67. The number is 34 more than in 1891.

Sex.—Of the 67 decedents from scarlatina, 38 were males and 29 were females; or about 76 females to every 100 males.

Parentage.—There were 21 of native parentage, and 46 of foreign; a proportion of about 219 of foreign parentage to every 100 of native.

The following Table will present the statistics of scarlatina for the last thirty-eight years, from 1855 to 1892, inclusive, the number and percentage and sex of the decedents from scarlatina, and the number from scarlatina in each division of the State. It also shows, from 1865 to 1892, inclusive, the *parentage* of the decedents from scarlatina:

TABLE LXXXVIII.

Mortality in the State from Scarlet Fever, 1855 to 1892, inclusive.

YEARS.	Number of Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City	Washington County.
10 yrs., 1855-1864	1,256	4.9	611	645	....	......	46	62	189	334	568	57
1865-1869.......	676	4.3	321	352	316	360	58	43	27	206	309	33
1870-1874.	913	4 9	455	488	420	523	33	29	51	289	475	66
1875	185	4.3	85	100	121	64	8	30	3	35	94	15
1876	80	1.9	34	46	42	38	3	2	7	21	35	12
1877...........	62	1.4	26	36	29	33	14	4	3	21	12	8
1878...........	86	1 9	41	45	35	51	3	5	3	14	47	4
1879	311	7.4	164	147	130	181	3	6	4	37	255	6
1875-1879.......	724	3 3	350	374	357	367	31	47	20	128	453	45
1880...........	468	10.0	215	253	216	252	22	30	11	143	243	19
1881...........	138	3.0	79	59	62	76	11	25	12	41	45	4
1882......	45	0.9	24	21	16	29	......	3	16	7	18	1
1883	34	0.6	17	17	14	20	1	1	5	9	16	2
1884.......	97	1.8	39	58	41	56	.....	.....	8	28	57	4
1880-1884.......	782	3.1	374	408	349	433	34	59	52	228	379	30
1885...........	91	1.7	36	55	48	43	... ..	3	6	21	38	20
1886	88	1.5	46	42	29	59	. ....	13	2	41	30	2
1887	266	4 2	120	146	95	171	9	16	4	80	154	3
1888	207	3.1	101	106	91	116	1	29	10	87	80	......
1889	51	0.8	24	27	14	37	3	2	6	14	25	1
1885-1889......	703	2.4	327	376	277	426	13	63	28	246	327	26
1890.	16	0 2	11	5	6	10	......	3	. . .	2	8	3
1891........ ...	33	0.5	17	16	12	21	1	3	.. ..	9	17	3
1892...........	67	0.9	38	29	21	46	1	4	4	20	38	.. ..
Total, 38 years.	5,200	4.0	2,507	2,693	1,758	2,186	217	313	371	1,162	2,574	263

* Not including Providence city.

CROUP, DIPHTHERIA AND SCARLATINA.—*Season and Mortality.*

The following Table is continued, to show by comparison the *influence* of *season* in regard to the mortality from croup and scarlatina for *forty* years, and diphtheria for *thirty-five* years. The Table will give the average *monthly* and *quarterly* percentages of deaths from each cause :

TABLE LXXXIX.

MONTHS.	CROUP. 1853-1892.		DIPHTHERIA. 1858-1892.		SCARLATINA. 1853-1892.	
	Number of deaths.	Per cent.	Number of deaths.	Per cent.	Number of deaths.	Per cent.
January	379	12.67	446	9.80	708	12.16
February	321	10.73	327	7.18	640	10.99
March	271	9.06	350	7.69	577	9.91
First Quarter	971	32.46	1,123	24 67	1,925	33 06
April	211	7.05	304	6.68	483	8.29
May	154	5.15	312	6.84	515	8.85
June	134	4.48	271	5.96	441	7.57
Second Quarter	499	16.68	887	19.48	1,439	24.71
July	101	3.38	263	5.78	335	5.76
August	86	2.87	291	6,39	272	4 67
September	178	5 95	336	7.38	279	4.79
Third Quarter	365	12.20	890	19 55	886	15.22
October	322	10.77	568	12 47	404	6 94
November	421	14.08	567	12.45	512	8 80
December	413	13.81	518	11.38	656	11.27
Fourth Quarter	1,156	38.66	1,653	36.30	15.72	27.01
Totals	2,991	100.00	4,553	100.00	5,822	100 00

SUICIDE.

The number of deaths by suicide, in Rhode Island, during 1892, was 19, which is 21 less than in the preceding year.

There were 15 male and 4 female decedents from that cause, or a proportion of about four males to every one of the females.

Of the 19, 10 were of native parentage and 9 of foreign.

The means of self-destruction, according to the returns, were as follows: By chloroform, one male; by coal gas, one male; by cutting the throat, one male; by drowning, two males; by hanging, one female; by morphine, two males, one female; by shooting, two males; unspecified, six males and two females.

The proportion of suicides, to all other causes of death in Rhode Island, during 28 years has, in but one quinquennial period, exceeded one-half of one per cent.

Deaths by suicide have been more than 26 per cent. less during the last ten years, than during the first ten of the twenty-eight years, as may be seen in the following Table, although in 1891, the proportion was six-tenths of one per cent. and more than twice as large as that of 1890 and of 1892.

TABLE XC.

Mortality in the State from Suicide, with the Percentage of the Whole Number of Deaths, Sex, Parentage, and Locality, for twenty-eight years, from 1865 to 1892, inclusive.

YEARS.	Number of Deaths from Suicide.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County.	Providence County.*	Providence City.	Washington County.
1865-1869	71	.50	54	17	56	15	3	6	5	23	29	5
1870-1874	90	.52	67	23	61	29	2	10	8	25	40	5
1875	26	.63	17	9	14	12	1	1	.....	6	13	5
1876	18	.46	15	3	6	12	.....	.....	1	5	10	2
1877	22	.52	16	6	15	7	.....	2	1	5	12	2
1878	21	.50	16	5	12	9	3	2	.....	5	7	4
1879	13	.31	10	3	5	8	.....	.....	.....	5	7	1
1875-1879	100	.48	74	26	52	48	4	5	2	26	49	14
1880	10	.20	5	5	8	2	.....	1	1	6	2	.....
1881	23	.49	19	4	15	8	.....	5	3	.....	14	1
1882	31	.64	23	8	23	8	1	4	3	8	12	3
1883	25	.47	18	7	11	14	.....	.....	2	8	15	.....
1884	22	.43	20	2	13	9	.....	1	1	6	11	3
1880-1884	111	.45	85	26	70	41	1	11	10	28	54	7
1885	20	.37	16	4	11	9	1	1	6	3	6	3
1886	17	.29	16	1	12	5	1	3	2	4	7	.....
1887	16	.25	13	3	8	8	2	.....	2	5	7	.....
1888	21	.42	20	1	15	6	.....	1	3	6	9	2
1889	24	.38	20	4	9	15	.....	2	5	7	10	.....
1885-1889	98	.34	85	13	55	43	4	7	18	25	39	5
1890	19	.28	15	4	12	7	2	.....	1	8	5	3
1891	40	.61	27	13	15	25	2	2	.....	10	24	2
1892	19	.26	15	4	10	9	.....	.....	4	6	8	1
Total, 28 years.	548	.41	422	126	331	217	18	41	48	151	248	42

* Not including Providence city.

WHOOPING COUGH.

The number of deaths from whooping cough, returned in 1892, was 25, 52 less than the number in 1891.

Of the 25 decedents from whooping cough, 10 were males and 15 were females.

There were 14 decedents of native parentage and 11 of foreign, or a proportion of 127 of native to 100 of foreign.

Of the 25 decedents, 24 were under 5 years of age, and the remaining 1 was between 20 and 30 years of age.

The following Table will present the mortality from whooping cough, for twenty-eight years, 1865–1892, inclusive, with the death-rate, sex, parentage, etc., of the decedents:

TABLE XCI.

Mortality in the State from Whooping Cough—1865–1892.

YEARS.	Total Deaths.	Per cent.	SEX.		PARENTAGE.		DIVISIONS OF THE STATE.					
			Males.	Females.	Native.	Foreign.	Bristol County.	Kent County.	Newport County	Providence County.*	Providence City.	Washington County.
5 yrs , 1865-1869	170	1.09	86	84	75	95	2	12	17	62	70	7
1870-1874.......	168	.86	69	99	68	100	2	12	13	47	90	4
1875............	31	.72	15	16	12	19	2	1	......	20	7	1
1876...........	48	1.17	19	29	20	28	5	3	1	7	31	1
1877............	32	.72	18	14	6	26	......	.. ..	1	15	16	......
1878	54	1.22	26	28	30	24	......	1	......	9	43	1
1879............	43	.96	17	26	22	21	......	11	1	12	15	4
1875-1879.......	208	.96	95	113	90	118	7	16	3	63	112	7
1880............	20	.41	10	10	7	13	......	......	2	6	11	1
1881............	68	1.36	33	35	30	38	......	2	2	24	40	......
1882............	71	1.40	33	38	32	39	.....	4	......	26	40	1
1883............	9	.17	6	3	5	4	1	......	......	4	4	......
1884............	43	.83	17	26	23	20	5	......	2	6	28	2
1880-1884.......	211	.83	99	112	97	114	6	6	6	66	123	4
1885	42	.79	23	19	24	18	......	1	4	9	24	4
1886............	49	.83	28	21	17	32	4	3	......	18	23	1
1887............	21	.32	9	12	10	11	......	......	4	6	10	1
1888	44	.75	17	27	16	28	......	3	2	11	28	......
1889......	77	1.23	39	38	36	41	1	12	1	20	43	......
1885-1889.......	233	.77	116	117	103	130	5	19	11	64	128	6
1890....	70	1.00	25	45	25	45	2	2	7	27	30	2
1891............	77	1.16	39	38	37	40	3	1	3	15	54	1
1892............	25	.34	10	15	14	11	......	1	3	12	9	......
Total, 28 years.	1,162	.88	539	623	509	653	27	69	63	356	616	31

* Not including Providence City.

TABLE XCII.

Presenting the ratio of Mortality to the Whole Number of Specified Causes of Death, of twenty-three Prominent Causes, for eighteen years, 1875–1892.

CAUSES OF DEATH.	YEARS.								
	1875.	1876.	1877.	1878.	1879.	1880.	1881.	1882.	1883.
Accidents (all kinds)	3.31	3.40	3.10	2.89	2.43	3.51	3.04	3.44	2.84
Apoplexy and Paralysis	3.61	4.01	4.25	4.45	5.21	4.67	5.23	5.52	5.39
Brain, Diseases of	2.98	3.64	3.68	3.28	3.73	3.44	3.84	3.60	3.50
Bronchitis	1.39	1.46	1.62	1.89	1.47	1.98	1.80	2.08	2.04
Cancer	2.31	2.72	3.17	2.82	2.96	2.72	3.11	2.75	3.30
Cholera Infantum	7.74	6.41	6.08	3.97	3.81	5.43	5.15	6.77	4.73
Consumption	15.79	16.78	15.52	15.98	15.09	14.02	15.12	15.33	15.01
Convulsions	2.43	2.28	1.95	2.65	2.47	2.88	2.18	2.29	2.47
Croup	2.33	2.61	2.23	2.20	2.28	1.45	2.16	1.60	1.40
Debility*	2.61	2.80	2.65	1.91	2.35	3.09	2.61	2.69	1.14
Diarrhœa	1.70	1.87	2.11	1.25	1.26	1.52	1.65	1.87	2.55
Diphtheria	.80	4.07	11.56	10.28	6.14	3.40	4.63	2.10	1.88
Dysentery	.88	1.28	1.22	.95	1.01	.61	.90	1.42	1.06
Fevers	3.40	3.00	3.55	3.94	2.70	3.37	3.05	4.60	5.12
Heart, Diseases of	4.31	4.03	4.28	3.92	4.78	5.03	5.68	5.31	6.35
Hooping Cough	.75	1.23	.75	1.28	1.02	.41	1.46	1.48	.17
Hydrocephalus	1.24	1.74	1.29	1.65	1.36	1.01	1.20	1.02	.87
Kidneys, Diseases	1.58	1.28	1.57	1.89	1.88	2.02	1.69	1.79	2.43
Liver, Diseases of	1.14	1.15	1.06	1.06	1.17	1.20	.82	1.21	.83
Marasmus	1.46	1.13	.99	1.30	1.16	1.27	1.11	1.62	2.02
Old Age	5.25	6.18	5.00	5.25	5.22	5.95	5.29	5.89	5.22
Pneumonia	7.83	8.69	5.31	7.49	7.37	7.90	7.01	7.16	7.84
Scarlatina	4.50	2.05	1.46	2.03	7.37	9.99	2.96	.94	.64

---

* Not infantile.

TABLE XCII —Continued.

CAUSES OF DEATH.	YEARS.								
	1884.	1885.	1886.	1887.	1888.	1889.	1890.	1891.	1892.
Accidents (all kinds)	3.80	3.09	3.22	3.25	3.01	3.46	3.60	3.54	4.18
Apoplexy and Paralysis	5.78	5.38	5.69	4.17	5.50	5.17	4.91	5.08	4.89
Brain, Diseases of	2.97	3.61	3.11	3.29	3.43	3.03	3.13	3.36	3.33
Bronchitis	2.29	3.09	2.96	2.77	3.42	4.20	4.01	3.74	4 16
Cancer	3.03	3.59	2.77	2.50	2.99	3.03	2.41	2.66	2.45
Cholera Infantum	6.31	5.16	6.27	5.60	7.08	6.80	8.39	8.25	8.56
Consumption	14.34	14.45	14.12	11.19	12.13	11.61	12.29	11.18	10.26
Convulsions	2.70	2.06	2.06	2.51	2.31	2.17	2.24	1 97	2.19
Croup	1.55	1.74	1.55	1.79	1.19	1.28	1.19	1.01	1.20
Debility*	2.87	2.45	2.91	1.18	1.38	2.07	1.93	1.82	1.30
Diarrhœa	2.20	1.55	1.59	2.09	1.20	1.40	1.37	1.26	1.73
Diphtheria	2.31	1.83	3.90	4.53	2.86	2.93	3 04	1.54	1.20
Dysentery	.78	.68	1.13	1.04	1.11	1.14	1.25	.89	.96
Fevers	3.24	2.93	2.87	2.00	3.58	2.29	2.26	2.37	1.88
Heart, Diseases of	5.60	6.48	6.20	6.46	6.56	7.35	5.84	7.25	6.84
Hooping Cough	.83	.79	.83	.32	.75	1.23	1.00	1.16	.34
Hydrocephalus	.81	.31	.41	.41	.47	.20	.37	.34	.30
Kidneys, Diseases of	2.52	3.14	2.64	2.66	3.24	3.38	3.20	3.71	3.49
Liver, Diseases of	.88	.87	1.08	1.34	1.19	1.30	.94	2.23	1.20
Marasmus	1.62	2.15	.22	1.57	1.16	1.63	.96	1.19	.94
Old Age	5.68	4.95	4.69	4.38	4.35	3.63	2.87	2.80	3.46
Pneumonia	7.14	8.65	8.18	7.70	7.62	7.69	8.20	8.60	8.85
Scarlatina	1.88	1.70	1.50	4.20	3.11	.82	.23	.50	.91

* Not infantile.

TABLE XCIII.

Summary of the Principal Occupations and Causes of Death from June 1, 1852, to January 1, 1893, a period of Forty-one years. Ages under 20 excluded.

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder Diseases.	Bowel Diseases.	Brain Diseases.	Bronchitis.	Cancer.	Diabetes.	Diarrhea and Dysentery.	Dropsy.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Hernia.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Phthisis.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.	Tetanus.
Males.																															
AGENTS	152	11	5	10	....	4	2	5	1	6	...	3	2	1	2	1	11	14	..	1	15	1	3	3	31	1	11	..	2	3	..
BAKERS	114	7	1	13	1	2	3	..	1	4	2	1	5	1	....	1	3	11	1	1	6	4	6	1	23	..	6	3	2	3	2
BANKERS AND BROKERS	100	3	1	11	...	2	2	3	1	5	2	1	....	...	1	1	5	15	..	1	12	2	6	...	12	...	11	...	..	3	..
BARBERS	173	6	4	9	1	.	3	8	2	2	....	2	1	...	....	1	8	14	..	....	8	2	3	2	82	...	11	2	.	2	
BLACKSMITHS	494	24	13	51	1	1	10	19	5	17	2	9	12	2	4	2	22	38	.	1	21	17	29	3	131	1	10	4	5	7	..
BLEACHERS	43	1	....	1	1	....	1	2	....	1	...	2	...	...	1	..	2	2	..	...	3	..	3	2	14	2	4	...	1	...	..
BOILERMAKERS	52	7	3	6	...	...	....	3	....	...	....	1	...	....	....	..	1	7	1	....	...	..	...	...	17	1	2	1	..	1	1
BOOKBINDERS	24	..	1	...	...	...	2	2	....	....	...	...	....	1	..	..	1	1	..	...	1	1	2	....	10	...	1	1	..	...	..
BOOK-KEEPERS	303	17	4	29	1	1	1	10	3	3	4	1	3	....	2	..	12	22	..	1	24	9	7	2	107	2	27	1	2	4	1
CABINETMAKERS	105	3	1	10	1	1	3	6	2	4	1	1	1	....	1	..	..	13	..	..	3	5	15	..	26	1	5	....	1	1	
CALICO-PRINTERS	50	2	6	4	1	..	1	1	...	2	....	1	1	...	....	..	....	6	..	...	1	1	4	...	13	....	3	....	..	3	..
CARPENTERS	1,535	132	19	127	5	14	27	47	16	53	5	32	26	5	11	1	69	138	4	14	63	32	110	15	358	6	151	13	17	23	2
CARRIAGE MAKERS AND TRIMMERS	57	2	...	7	...	...	..	1	3	3	...	1	1	..	1	..	1	4	..	...	5	4	2	..	16	..	5	...	...	1	.
CIGARMAKERS	78	2	2	1	...	1	1	1	2	5	..	..	1	...	....	..	3	4	..	...	4	2	3	.	36	...	7	1	2	.	

Table XCIII.—Continued.

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder Diseases.	Bowel Diseases.	Brain Diseases.	Bronchitis.	Cancer.	Diabetes.	Diarrhœa and Dysentery.	Dropsy.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Hernia.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Phthisis.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide,	Tetanus.
Clergymen	179	4	....	22	.. ..	3	1	4	7	8	3	6	1	1	1	1	5	21	..	4	9	12	18	....	21	....	21	1	2	3	..
Clerks and Salesmen	779	34	11	38	....	5	16	21	8	18	7	7	....	3	2	1	75	55	..	7	42	9	3	8	279	3	92	11	11	13	..
Confectioners	33	1	....	1	1	1	....	1	1	1	....	2	2	...	....	..	2	3	..	....	3	1	1	....	9	....	2	....	....	1	..
Coopers	107	3	1	16	1	2	3	1	4	1	1	1	3	....	1	1	4	8	2	1	4	3	17	....	18	1	8	..	....	2	..
Dentists	23	....	....	2	....	....	1	2	2	1	.. ..	1	....	....	....	..	4	4	..	....	....	....	1	....	3	....	2	....	..	....	..
Dyers	87	4	...	5	1	....	4	2	1	1	.. .	4	2	1	1	..	9	13	..	....	2	....	6	1	17	....	10	....	2	1	..
Engineers and Firemen	255	45	3	22	1	5	3	7	2	7	1	4	2	....	1	3	9	29	..	1	17	7	5	2	47	....	28	..	4	....	..
Engravers	102	4	1	8	....	1	3	3	2	3	....	...	5	1	...	..	6	14	..	2	2	3	1	....	35	....	4	...	2	2	..
Farmers, etc	5,342	223	46	596	17	99	115	132	57	235	34	110	195	15	54	9	244	575	17	32	151	113	914	16	698	33	446	44	45	66	11
File-cutters	57	....	1	5	....	....	2	2	2	....	....	..	1	....	....	..	1	4	..	....	...	....	1	....	28	....	8	....	...	2	..
Fishermen and Oystermen	171	30	3	9	....	2	3	5	....	6	2	2	5	....	2	..	14	12	1	1	4	6	20	....	29	..	8	2	1	2	2
Gasfitters	42	1	2	4	....	....	...	....	....	3	....	....	....	....	....	..	1	3	..	1	4	...	....	....	19	1	1	....	2	....	..
Grocers	340	6	6	39	6	8	4	12	5	15	2	5	4	2	5	3	15	31	..	3	18	13	24	6	62	2	34	1	4	5	..
Harnessmakers and Saddlers	87	5	3	4	....	....	...	4	1	2	1	2	1	1	1	..	3	8	..	....	4	3	3	....	28	....	8	....	2	3	..
Hotel-keepers	117	3	3	11	1	1	3	6	2	2	....	3	3	....	....	1	2	16	1	3	6	9	5	....	22	1	7	1	1	4	..
Jewelers	766	28	12	54	3	7	10	14	12	12	4	14	6	2	6	2	39	63	1	15	31	15	5	8	334	....	43	5	9	12	..
Laborers	7,295	693	155	388	45	68	170	139	159	161	23	160	98	27	44	37	357	544	14	40	209	146	515	32	2074	45	736	54	86	66	10

LAWYERS	130	5	1	19	....	2	1	10	....	1	....	2	1	1	1	..	5	21	1	4	13	5	6	....	21	....	7	1	2	....	..
MANUFACTURERS	471	22	3	69	3	15	8	18	9	22	9	7	7	1	6	1	25	58	2	4	31	9	20	3	59	1	40	3	10	6	..
MACHINISTS	1,089	66	13	93	2	10	13	40	12	31	7	19	17	4	7	..	47	98	2	8	47	19	38	3	325	8	122	10	16	12	..
MASONS	638	40	6	60	4	11	10	14	11	30	5	6	11	....	2	4	23	63	1	7	34	12	53	8	107	2	91	3	13	7	..
MERCHANTS	950	21	6	124	4	15	24	52	10	39	7	20	13	11	11	..	42	138	1	12	62	24	68	7	133	4	78	4	10	9	1
MILLERS	37	5	1	4	....	....	1	1	1	1	....	1	....	1	...	..	1	1	..	....	2	2	3	...	7	....	4	....	....	1	..
MOULDERS	215	13	3	19	1	....	2	2	6	6	1	4	1	....	1	..	17	15	..	3	4	...	5	...	56	2	47	3	2	2	..
MUSICIANS	48	3	2	8	....	...	....	4	1	1	1	....	1	....	....	..	2	3	..	1	5	1	1	....	8	....	3	1	1	1	
OPERATIVES	1,707	117	22	80	2	9	40	41	36	36	8	32	24	5	10	7	110	132	8	18	65	34	36	10	589	13	152	22	23	25	1
PAINTERS AND GLAZIERS	605	45	11	76	1	7	12	16	5	15	1	18	6	1	2	1	13	63	3	13	31	13	19	2	150	7	56	6	6	6	..
PATTERN-MAKERS	48	1	2	7	....	1	1	1	....	4	....	1	....	....	1	..	2	9	..	...	1	....	2	...	9	1	4	1	....	....	..
PEDDLERS	113	7	3	11	1	1	2	2	2	2	....	2	....	...	1	..	6	12	..	1	6	1	8	...	25	....	16	2	...	2	..
PHYSICIANS	225	6	3	36	1	2	5	12	2	8	3	5	1	...	1	1	6	29	1	5	11	6	12	1	38	1	21	1	5	2	..
PLUMBERS	68	10	1	2	....	....	1	4	2	....	....	1	....	....	1	1	5	5	..	....	1	...	1	....	22	....	10	....	...	1	..
PRINTERS	151	4	2	8	....	2	2	4	4	6	1	1	2	1	....	..	6	...	12	1	7	4	3	2	59	1	13	2	2	2	..
RUBBER-WORKERS	115	3	....	7	....	....	1	3	4	6	....	2	1	....	..	..	8	6	..	1	3	1	....	...	57	...	10	1	....	1	..
SAILMAKERS	28	4	1	2	....	2	....	1	....	....	1	....	....	....	....	..	1	4	1	2	1	....	....	..	4	....	1	...	1	2	..
SAILORS, ETC	653	78	18	59	1	4	10	24	7	10	2	17	13	5	8	4	52	54	2	5	22	12	50	1	126	4	48	7	4	5	1
SHOEMAKERS	474	14	15	53	2	5	6	11	8	15	2	16	12	1	6	1	18	42	1	5	19	16	56	3	106	2	27	5	3	4	..
SHIP-MASTERS	121	6	1	29	....	3	1	4	4	4	....	1	4	3	3	..	....	13	..	3	7	1	17	....	5	1	8	....	....	3	..
SILVERSMITHS	85	2	3	6	....	....	1	3	.. .	2	1	1	1	....	3	..	4	8	..	...	5	1	5	1	31	1	6	....	....	...	
STONECUTTERS AND MARBLE-WORKERS	199	11	2	6	1	1	4	5	5	6	1	3	2	1	1	..	12	21	..	3	6	2	5	. ..	72	....	16	3	5	2	.
STUDENTS	59	3	....	...	....	....	1	6	1	1	....	1	....	....	....	..	11	1	..	...	1	....	1	1	25	. ..	4	....	....	2	..
TAILORS	325	10	7	27	2	8	6	6	7	9	...	11	6	1	....	1	10	36	..	1	27	9	13	1	94	2	22	4	2	3	..
TEAMSTERS	373	48	3	26	...	4	9	7	2	16	2	7	6	2	4	3	27	39	..	2	18	8	9	4	90	2	22	4	4	3	2

TABLE XCIII.—Continued.

OCCUPATIONS.	Whole Number.	Accidents.	Alcoholism.	Apoplexy and Paralysis.	Asthma.	Bladder Diseases.	Bowel Diseases.	Brain Diseases.	Bronchitis.	Cancer.	Diabetes.	Diarrhœa and Dysentery.	Dropsy.	Epilepsy.	Erysipelas.	Fevers, Malarial.	Fevers, Typhoid, etc.	Heart Diseases.	Hernia.	Insanity.	Kidney Diseases.	Liver Diseases.	Old Age.	Peritonitis.	Phthisis.	Pleurisy.	Pneumonia.	Rheumatism.	Stomach Diseases.	Suicide.	Tetanus.
TANNERS AND CURRIERS	38	5	....	4	....	....	1	..	1	2	....	....	....	....	1	1	2	4	..	....	1	1	4	....	4	....	3	2	..	2	..
TEACHERS AND PROFESSORS	101	3	...	9	...	1	1	5	3	5	....	1	3	1	....	..	10	5	..	1	3	2	5	....	34	....	5	1	1	2	..
TINSMITHS	87	6	2	6	1	....	....	1	....	1	....	....	1	1	....	..	7	3	..	1	2	3	4	....	34	1	8	2	2	1	..
UPHOLSTERERS	40	3	...	2	....	1	....	....	1	....	....	...	....	...	1	..	1	4	..	....	3	....	....	....	18	....	3	...	1	2	..
WHEELWRIGHTS	75	4	3	8	....	2	...	1	3	3	....	....	....	....	1	..	3	10	..	1	4	3	9	....	11	...	8	....	....	1	..
MALES	28,330	1869	441	2363	114	337	557	761	448	863	146	555	514	103	213	90	1404	2589	77	231	1115	611	2185	148	6921	153	2597	233	316	342	34
Females.																															
DRESSMAKERS AND SEAMSTRESSES	262	4	....	11	1	....	1	4	7	24	1	4	3	....	3	2	13	23	..	1	9	5	6	5	106	2	17	2	5	3	..
MILLINERS	36	1	1	1	...	...	1	....	....	2	....	1	....	....	...	..	4	4	..	...	4	1	...	1	11	....	3	....	1	....	..
NURSES	72	3	...	9	....	....	2	3	....	4	....	1	2	....	....	..	7	8	..	1	3	1	7	1	8	1	10	....	....	1	..
OPERATIVES	651	13	3	17	...	....	12	6	18	17	1	10	7	....	4	3	38	33	..	2	11	5	7	9	369	5	45	5	8	3	..
TAILORESSES	122	...	....	11	1	....	1	1	....	8	2	2	2	....	1	..	6	6	..	3	2	1	13	....	49	....	9	1	2	1	..
TEACHERS	165	3	....	6	....	1	4	4	1	13	3	3	1	1	....	..	12	7	..	1	2	2	10	....	71	1	15	1	2	1	..
FEMALES	1,308	24	4	55	2	1	21	18	26	68	7	21	15	1	8	5	80	81	..	8	31	15	43	16	614	9	99	9	18	9	..
TOTAL	29,638	1893	445	2418	116	338	578	779	474	931	153	576	529	104	221	95	1484	2670	77	239	1146	626	2228	164	7535	162	2696	242	334	351	34

TABLE XCIV.

Occupations and Ages of Decedents from June 1, 1852, to January 1, 1893, comprising a period of Forty years and seven months. Occupations under ten and Ages under twenty excluded

OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.	OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.
Males.							
Actors	10	338	33 80	Stable Keepers	65	3,562	54.80
Agents, etc	179	9,263	51.75	Brakemen.	79	2,224	28.15
Artists	29	1,409	48.59	Brewers	15	742	49 47
Bakers	118	6,403	54 26	Brick and Stone Layers	11	526	47.82
Bankers and Brokers	111	6,584	59 32	Butchers and Marketmen	229	11,755	51 33
Bank Officers	61	3,928	64.39	Calico Printers	56	3,046	54 39
Barbers	191	7,099	37.17	Calkers	10	736	73.60
Bartenders	23	855	37.17	Carpenters and Joiners	1,687	92,344	54.72
Blacksmiths, etc	552	29,728	53.86	Civil Engineers	37	1,823	49.27
Bleachers and Fullers.	53	2,687	50.70	Clerks and Salesmen	891	33,231	37 30
Boat Builders	23	1,349	58.65	Clergymen	201	12,753	63 45
Boatmen	24	1,377	57.29	Clothiers	11	655	59.55
Boiler Makers	61	2,352	38 56	Coachmen	157	6,814	43.40
Box	14	590	42.14	Collectors	16	967	60 44
Broom and Brush.	13	611	49.54	Confectioners	36	1,599	44.42
Cabinet	121	7,028	58.08	Contractors and Builders	61	3,538	58.00
Carriage, etc	61	3,239	53.10	Cooks and Caterers	64	3,027	47.30
Cigar	92	4,070	40.24	Coopers	116	7,651	65.96
Harness, etc.	95	4,507	47.44	Dentists	28	1,518	54.21
Pattern	56	3,165	56.52	Designers.	12	617	51.42
Pump and Block.	14	788	56.29	Druggists and Apothecaries	69	3,197	46 33
Rope	25	1,672	66 88	Dyers.	104	5,283	50.80
Sail	32	1,886	58.94	Die Sinkers	17	767	45.12
Sash and Blind	10	506	50 60	Drivers	15	617	41.13
Shoe	521	30,235	58.03	Cab, etc.	34	1,480	43 53
Tool	17	816	48 00	Car, etc	20	723	36.15
Watch.	29	1,581	51 52	Engineers and Firemen	287	13,401	46.69
Bookbinders	21	921	43 86	Engravers.	118	5,609	47.51
Book-keepers	319	15,198	44.41	Expressmen.	72	3,586	49.81
Hotel	138	7,611	55.15	Farmers	5,871	390,925	66.59
Saloon, etc	157	7,115	45.32	File-cutters	69	2,828	41.86

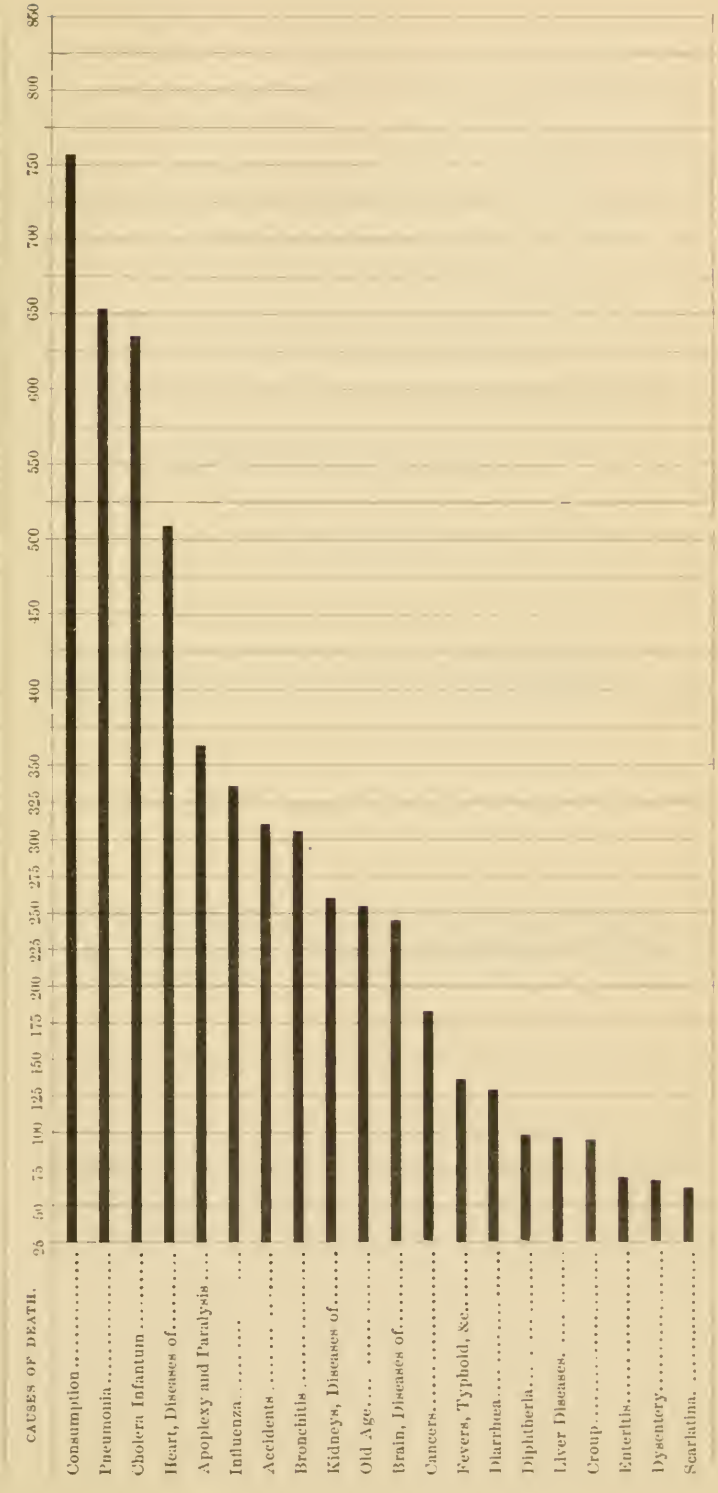
Table XCIV.—Continued.

OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.	OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.
Nail Cutters	11	422	38.36	Operatives	1,946	84,675	43.51
Fish and Oyster Dealers	14	841	60.71	Painters and Glaziers	682	31,975	46.88
Junk	10	590	59.00	Paper Hangers	16	812	50 75
Liquor	87	3,840	44.14	Peddlers	138	6,937	50.26
Fishermen and Oystermen	198	9,766	49.32	Photographers and Lithog's	22	978	44.45
Florists	22	1,043	47.41	Physicians	260	15,458	59.45
Founders	10	381	38 10	Pilots	16	891	55.69
Gardeners	234	13,842	59.15	Plasterers, etc.	38	1,825	48.03
Gas Fitters	51	2,162	42 39	Plumbers	71	2,816	39 36
Gentlemen	42	2,792	66.48	Polishers	16	762	47.67
Grocers	368	19,873	54.00	Porters	40	1,932	48.30
Gun and Locksmiths	23	1,290	56.09	Printers	165	774	46.91
Hatters	23	1,225	53.26	Public Officers	69	4,061	58 86
Hostlers	94	3,961	42.14	Railroad Officials	78	3,538	45.36
Janitors	51	2,587	50 73	Riggers	22	1,254	57.00
Jewelers	819	33,179	40.51	Roll Coverers	27	1,631	60.41
Journalists	27	1,230	45 56	Rubber Workers	122	4,962	40.67
Judges and Justices	13	862	66.31	Sailors	223	10,923	48.97
Laborers	8,087	398421	49.27	Sea-captains	140	9,331	66.65
Lamplighters	12	656	54.67	Servants	21	983	46.81
Lawyers	148	8,149	55.06	Sheriffs, Police, etc	98	5,512	56.24
Machinists	1,216	59,127	48 62	Ship-carpenters	64	4,357	68.23
Mail Carriers	11	506	46.00	Silversmiths	97	4 325	44.59
Manufacturers	508	30,804	60.64	Soldiers	138	4,197	30.41
Mariners	511	25,226	49 37	Stevedores	15	712	47.77
Masons	704	40,161	57.05	Stewards	13	506	38.92
Mechanics	444	23,590	53.13	Stone-cutters, etc.	211	10,521	49.86
Merchants	1,063	62,618	58.90	Students	64	1,437	22.45
Millers	42	2,465	58.69	Superintendents, etc	220	11,942	54.22
Millwrights	31	2,032	65.55	Tailors	357	19,325	54.13
Miners	14	771	55.07	Tanners and Curriers	43	2,667	62.02
Moulders	241	11,103	46.07	Teachers and Professors	123	5,994	48.73
Musicians	56	2,668	47.64	Teamsters	454	21,425	47.19
Naval Officers	16	765	47.81	Telephone and Teleg'h Op.	17	507	29.82
Nurses	12	622	51.83	Tinsmiths	93	4,095	44 03

TABLE XCIV.—Continued.

OCCUPATIONS.	Total Mortality	Aggregate Ages.	Average Age.	OCCUPATIONS.	Total Mortality.	Aggregate Ages.	Average Age.
Tobacconists......	10	594	59 40	Dress-makers, etc	286	12,040	42.09
Traders	278	13,973	50.26	Housewives.	151	7,776	51.50
Tradesmen, General	178	9,624	54.07	Jewelers	14	376	26.86
Undertakers	34	2,025	59 56	Laboring	16	699	43 69
Upholsterers	40	1,570	39 25	Laundresses.	27	1,314	49.78
Waiters	103	4,213	40.90	Milliners	50	1,749	34.98
Watchmen......	122	6,731	55.17	Nurses.....	88	5,445	61.81
Wheelwrights	92	5,552	60 35	Operatives	795	24,747	31.13
Wood Turners..	27	1,232	15.63	Rubber Workers.	13	406	31.33
Wool Sorters	38	1,724	45.37	Servants and Domestics...	426	20,613	48.36
				Sisters of Mercy	26	988	38.00
Total	35,912	1,883,636	52.45	Tailoresses	136	6,272	46.12
Females.				Teachers....	194	8,117	41.84
Boarding-house Keepers.	21	1,340	63.81				
House............	2,213	122,760	55.47	Total.........	4,502	216,699	48.02
Clerks and Saleswomen.	18	512	28.44				
Cooks	28	1,515	54.11	Grand total.	40,414	2,100,335	51.97

Diagram III. Exhibiting the comparative mortality by absolute number of decedents, from twenty principal causes of death in Rhode Island, in 1892.



APPENDIX A.

NOMENCLATURE OF DISEASES,

OR

CAUSES OF DEATH.

NAMES OF CAUSES OF DEATH.

It should be stated that the nomenclature of diseases in the nosological arrangement on the following pages is not intended to include the names of the whole list of morbid phenomena affecting the human organism, but the names of such only as are directly the **cause of death**, or such as ordinarily predispose to or set in motion the morbid processes that end in death.

In the construction of the classification now adopted, use has been made of the results and conclusions of a committee of the Royal College of Physicians of England, and from such other sources as were accessible, and from examination of the classifications in use in different countries in Europe and America. It has been the design to have all these classifications based on observed facts and most advanced conclusions in relation to pathological processes and morbid conditions, inductive, causative, progressive and ultimate.

The statistical nosology will consist of two lists of causes of death,

A TABULAR LIST AND SUPPLEMENTAL LIST.

The TABULAR LIST comprises the chief or primary causes of death which will be used in Table IX, on Classification and Percentage, in the preparation of the Registrar's annual reports, and will, therefore, include all those named in the SUPPLEMENTAL LIST, when the final arrangement is completed.

The SUPPLEMENTAL List is Subordinate to the TABULAR LIST, and contains synonyms, or names of related diseases, which may be actually, or are supposed to be, causes of death, and which are in addition to those in the TABULAR LIST, and which are often found in PHYSICIAN'S **certificates of death**, as reported to the State Registrar. These will have a place, in alphabetical order, in Tables VII and VIII of the reports, and will be variously grouped under different heads in Table IX, as the figure which precedes each cause in the SUPPLEMENTAL LIST will correspond, in the representation of diseased conditions, with the figure in the class and order in the TABULAR LIST, under which that cause is placed.

NOMENCLATURE OF CAUSES OF DEATH.

CLASSES.

I.	General Diseases.	—A.	SPECIFIC AND FEBRILE.	(*Zymotic.*)
II.	General Diseases.	—B.	CACHECTIC.	(*Constitutional.*)
III.	Special Diseases.	—A.	FUNCTIONAL OR ORGANIC.	(*Local.*)
IV.	Special Diseases.	—B.	DEVELOPMENTAL.	(*Developmental.*)
V.	Violence.	—C.	FROM INJURIES, ETC.	(*Violent.*)

SUB GROUPS OR ORDERS.

CLASS I.—**Zymotic Diseases.**

Order one, Miasmatic. Order two, Enthetic. Order three, Dietic. Order four, Parasitic.

CLASS II.—**Constitutional Diseases.**

Order one, Diathetic. Order two, Tubercular.

CLASS III.—**Local Diseases.**

Order one, Diseases of the Nervous System. Order two, Organs of Circulation. Order three, Organs of Respiration. Order four, Organs of Digestion. Order five, Urinary Organs. Order Six, Reproductive Organs. Order seven, Osseous and Locomotory Organs. Order eight, Integumentary System.

CLASS IV.—**Developmental Diseases.**

Order one, Of Children. Order two, Of Women. Order three, Of Old Age. Order four, Of Nutrition.

CLASS V.—**Deaths by Violence.**

Order one, Accidents and Negligence. Order two, Homicide. Order three, Suicide.

STATISTICAL NOSOLOGY.

CLASS I.—Zymotic Diseases.

TABULAR LIST.

For Table IX of the Registration Report.

ORDER ONE.—Miasmatic.

I. One.—1. Carbuncle
2. Cholera, Asiatic
3. Cholera, Sporadic
4. Cholera Infantum
5 Cholera Morbus
6 Croup (Pseudo Membranous)
7. Diphtheria
8 Diarrhœa
9. Dysentery
10 Erysipelas
11. Fever, Bilious
12. Fever, Cerebro Spinal
13. Fever, Intermittent
14. Fever, Malarial
15. Fever, Typhoid
16. Fever, Typho-Malarial
17. Fever, Unspecified
18. Fever, Yellow
19. Influenza (Epidemic)
20. Measles
21. Mumps
22. Metria (Puerperal Fever)
23. Pertussis
24. Tonsilitis
25. Scarlatina
26. Small Pox
27. Varicella

ORDER TWO.—Enthetic.

I. Two.—1. Glanders
2. Gonorrhœa
3 Hydrophobia
4. Malignant Pustule
5. Septicæmia
6. Syphilis

ORDER THREE.—Dietic.

I. Three.—1. Alcoholism
2. Delirium Tremens
3. Inanition
4 Purpura and Scurvy

ORDER FOUR.—Parasitic.

I. Four.—1. Apthæ
2. Worms
3. Other Parasites

SUPPLEMENTAL LIST.

Synonyms or Related Diseases.

ORDER ONE.—Miasmatic.

I. One.—1. Anthrax.
Gangrenous Boil
4 Entro Colitis, } Infantile.
Gastro Enteritis, }
10. Hospital Gangrene.
Pyemia
Phagadena.
Phlegmon
15 Infantile Fever.
Typhus Fever.
20 Rotheln.
21. Parotitis
22. Child-bed Fever.
23. Whooping Cough
24 Quinsy
25 Scarlet Fever.
Angina Maligna.
26. Varioloid
27. Chicken Pox.
Miliaria.

ORDER TWO.—Enthetic.

I. Two —2. Stricture of Urethra.
Gonorrheal Opthalmia.
5. Necusia.

ORDER THREE.—Dietic.

1. Three.—1. Intemperance.
2. Privation.
Starvation.
Neglect.

ORDER FOUR.—Parasitic.

1. Four.—1. Thrush.
2. Tape Worm.
Trichianasis.
3. Scabies
Hydatids.
Porrigo, Favus, etc.

CAUSES OF DEATH.

CLASS II.—Constitutional Diseases.

TABULAR LIST.	SUPPLEMENTAL LIST.
ORDER ONE.—Diathetic.	
II. One.—1. Gout	
2. Dropsy	II. One.—2. Anasarca.
3. Anæmia	3. Leucocythæmia. Chlorosis.
4. Cancer, Various	4. Soft Cancer. Epithelioma. Melanosis. Lupus. Other kinds of Cancer.
5. Cancer of Breast	
6. Cancer of Stomach	
7. Cancer of Uterus	
8. Noma (Canker)	
9. Mortification	9. Bed Sore. Dry Gangrene.
10. Rheumatism	10 Rheumatic Carditis. Rheumatic Synovitis Rheumatic Meningitis.
ORDER TWO.—Tubercular.	
II. Two.—1. Scrofula	II. Two.—1. Psoas (Lumbar) Abscess. White Swelling. Cretinism (Goitre.) Adenitis. Morbus Coxarius. Pott's Disease.
2. Tabes Mesenterica	2. Tubercular Peritonitis.
3. Phthisis (Pulmonary)	3. Hæmoptysis.
4. Hydrocephalus	
5 Tubercular Meningitis	

CLASS III.—Local Diseases.

TABULAR LIST.	SUPPLEMENTAL LIST.
ORDER ONE.—Nervous System.	
III. One.—1. Cephalitis	III. One.—1. Phrenitis. Meningitis. Cerebro Spinal Meningitis. (Sporadic.)
2. Cerebritis	
3. Apoplexy	
4. Paralysis	
5. Insanity	5. Monomania. Fright. Grief. Melancholia. Dementia. Rage.
6. Chorea	6. Hysteria.
7. Epilepsy	
8. Tetanus	8. Laryngismus. Lockjaw. Trismus Nascentium.
9. Convulsions	
10. *Brain Diseases**	10. Neuralgia, Cerebral. Neurasthenia. Disease of Spinal Cord. Necrencephalus (Ramollissement).
ORDER TWO.—Circulatory System.	
III. Two.—1. Pericarditis	III. Two.—1. Carditis. Endocarditis.
2. Aneurism	
3. *Heart Diseases**	3. Hypertrophia. Atrophia. Angina Pectoris. Syncope. Arteritis. Ossification of Arteries. Phlebitis. Hydropericardium. Embolus. Thrombosis.

---

* Not otherwise placed.

STATISTICAL NOSOLOGY.

CLASS III.—Local Diseases.—Continued.

TABULAR LIST.	SUPPLEMENTAL LIST.
ORDER THREE.—Respiratory System.	
III Three.—1 Epistaxis	
2. Laryngitis	III. Three.—2. Œdema Glottidis.
3. Bronchitis, Acute	
4. Bronchitis, Chronic	
5. Pleurisy	5. Empyema. Diaphragmitis. Pneumothorax. Hydrothorax.
6. Pneumonia	6. Pulmonary Apoplexy Hæmoptysis.† Congestion of Lungs.
7. Asthma	7. Grinders' Asthma. Miners' Asthma. Emphysema.
8. *Lung Diseases**	
ORDER FOUR.—Digestive System.	
III. Four.—1 Gastritis	III. Four.—1. Glossitis. Stomatitis. Pharyngitis. Œsophagitis.
2. Enteritis	2. Gastro Enteritis. Entero Colitis. Not Infantile.
3. Peritonitis	
4. Ascites	
5. Ulceration of Intestines	5. Perforation of—
6. Hernia	6. Congenital. Femoral. Inguinal. Scrotal. Umbilical. Ventral.
7. Ileus	7. Constipation. Obstipation. Perityphlitis. Typhlitis.
8. Intussusception	
9. Stricture of Intestines	9. Strict. Œsophagus.
10. Fistula	
11. *Stomach Diseases**	11. Dyspepsia. Pyrosis. Gastralgia. Hæmatemesis. Melæna.
12. *Pancreas Diseases**	
13. Hepatitis	
14. Jaundice	14. Gall-stones.
15. *Liver Diseases**	15. Cirrhosis.
16. *Spleen Diseases**	
17. *Bowel Diseases**	
ORDER FIVE.—Urinary System.	
III. Five.—1. Nephritis	
2. Ischuria	
3. Nephria (Bright's Disease)	III. Five.—3. Albuminuria.
4 Diabetes	
5. Calculus (Gravel, &c).	
6. Cystitis	6. Cystirrhœa.
7. Prostate, Disease of	
8. *Kidney Diseases**	8. Diuresis. Hæmaturia. Uræmia.
9 Bladder, Diseases of	9. Urethritis.
10. Testicles, Disease of	10. Orchitis. Hydrocele.
ORDER SIX.—Generative System.	
FEMALE.	
III. Six.—1. Ovarian Dropsy	III. Six.—1. Ovarian Tumor.
2. *Diseases of Uterus**	2. Hysteritis Metritis. Uterine Ulcer. Polypus, Tumor Fibroid. Ovaritis. Pelvic Cellulitis

---

* Not otherwise placed.

† See Class II, Order Two—3, Sup. List.

CAUSES OF DEATH.

CLASS III.—Local Diseases.—Continued.

TABULAR LIST.	SUPPLEMENTAL LIST.
ORDER SEVEN.—Osseous and Locomotory System.	
III. Seven.—1. Bones, Diseases of	III. Seven.—1. Ostitis. Periostitis. Fragilitas Ossium. Mollities Ossium. Rickets. Caries, Necrosis. Exostosis.
2. *Joint Diseases**	2. Synovitis. Hip Diseases.
3. Vertebræ, Diseases of	3. Spine Diseases. Spine, Caries and Necrosis.
ORDER EIGHT.—Integumentary System.	
III. Eight.—1. Phlegmon‡	III. Eight.—1 Abscess, part not stated. Boil. Whitlow.
2. Ulcer	
3. *Skin Diseases*	3. Roseola. Urticaria. Eczema. Herpes. Pemphigus. Ecthyma. Impetigo. Psoriasis, &c. Dermatitis (from burns, &c.).
ORDER NINE.—Organs of Special Sense.	
EYE AND EAR.	
III. Nine.—1. Malignus Oculi	
2. Opthalmitis	
3. Ossis Petrosis	
4. Otitis	

CLASS IV.—Developmental Diseases.

ORDER ONE.—Developmental Diseases of Children.	
IV. One.—1. Still born	
2. Debility, Infantile	IV. One.—2. Asthenia.
3. Debility, Premature Birth	
4. Cyanosis	4. Atelectasis Pulmonum.
5. Spina Bifida	
6 Other Malformations	6. Anus Imperforatus. Cleft Palate. Idiocy.
7. Teething	
8. Innutrition	8. Malnutrition.

---

* Not otherwise placed. † See Class II, Order Two—I, Sup. ‡ See Class I, Order One—10, Sup.

STATISTICAL NOSOLOGY.

CLASS IV.—Developmental Diseases.—Continued.

TABULAR LIST.	SUPPLEMENTAL LIST.
Order Two.—Developmental Diseases of Women.	—
IV. Two.—1. Paramenia	IV. Two —1. Amenorrhœa. Chlorosis.† Climacteria. Menorrhagia.
2. Childbirth*	2. Miscarriage. Abortion. Puerperal Mania. Puerperal Convulsions. Phlegmasis Dolens. Cæsarian Operation. Extra-Uterine Fœtation. Flooding. Retention of Placenta. Presentation of Placenta. Deformed Pelvis. Mammary Abscess.
Order Three.—Developmental Diseases of Old People.	
IV. Three.—1. Old Age	
Order Four.—Diseases of Nutrition. Adolescent and Adult.	
IV. Four.—1. Atrophy	IV. Four.—1 Marasmus. Malnutrition.
2. Debility	2. Asthenia. Exhaustion.

CLASS V.—Deaths by Violence.

Order One.—Accident or Negligence.	
V. One.—1. Fractures and Contusions	V. One.—1. Railroad and other Accidents.
2. Wounds, Unspecified	
3. Burns and Scalds	
4. Poison	
5. Drowning	5. Lost at Sea.
6. Suffocation	6. Asphyxia. Strangulation.
7. Various	7. Exposure. Cold Water. Frozen. Heat. Lightning. Surgical Operation.
Order Two.—Homicide.	V. Two.—1. Infanticide. Patricide. Matricide. Fratricide. Filicide, &c.
Order Three.—Suicide.	
V. Three.—1. Wounds, Unspecified	
Wounds, Pistol or Gunshot	
Wounds, Knife	
2. Poison	
3. Drowning	
4. Hanging	
5. Otherwise	

---

* See Class I, Order One—22, Tab. List.

† See Class II, Order One—3, Sup.

SUGGESTIONS

CONCERNING

PHYSICIANS' CERTIFICATES OF DEATH.

It should be the endeavor to specify the causes of death as definitely and correctly as possible. It is not unusual to find a return of death with the physician's certificate naming the cause of death "Paralysis," "Paraplegia," "Fits," "Convulsions," "Dropsy," etc., which are merely secondary or consecutive causes, simply symptoms only, or results of some organic lesion or pathological derangement. Sometimes the alleged cause is really the *final cause*, as in a case of termination of life by paralysis, but the cause given as paralysis is not the determining cause. Apoplexy, or some lesion of the nervous centres, must be the original and determining cause of paralysis, paraplegia, hemiplegia, etc., and the determining cause should be stated as the primary in the return or certificate.

Convulsions are the symptoms or results of some antecedent or concurrent disease. They follow meningitis and other structural lesions of the nervous centres; they also occur from reflex derangement or disturbance of the nervous centres, as, in children, from intestinal irritation, or from inflammation, as in gastritis, enteritis, nephritis, etc. In such cases they may be contributory to death, and perhaps, in rare instances, a final cause, by inducing or taking the form of tonic or tetanic spasm. But as contributory, or as a final cause, they are simply concomitant. They should find place as secondary causes only in certificates of death.

"Fits" is too unmeaning a term to be used in any case. The word in a medical sense means a paroxysm or spasm or an attack, or succession of attacks of some physical or mental disturbance, as "a fit of apoplexy," "a fit of melancholia," etc., and is not properly used as synonymous with convulsions from any cause. It would be just as sensible to attribute a death to a "paroxysm," an "occurrence" or an "attack" as a cause, as to "fits," without some qualification.

"Dropsy" and "Ascites" have been allowed to stand as determining causes of death because of extended use, and because of the obscurity with which their causes in rare instances are involved. We can scarcely conceive of a dropsical accumulation without antecedent organic or functional disorder, derangement of the absorbent or secretory system, or depravation of the blood. They are left in the tabular list with not a little reluctance. Paralysis, with cause unspecified, is also left in the tabular list for a like reason, and with the same doubt of propriety.

It may be suggested that it is sometimes difficult, and occasionally impossible to ascertain positively the chief or leading cause of death. The physician last in attendance may find several functional or structural diseases, the morbid conditions multiple and complex, and not only the initial derangement, but the succession of morbid processes, proximate, consecutive and ultimate, inextricably entangled and lost to discovery.

The careful diagnostician will, however, even then be able to *conceive the probable leading cause*, but whether or not, he will be able at least to ascertain the most prominent and controlling lesion or functional derangement then existing, and which may reasonably be accepted as the chief cause of death.

The preceding remark applies very properly to cases of adventitious diseases which prove fatal, when occurring in individuals already suffering from some chronic disease of slower progress, as when fatal dysentery attacks a consumptive person, or one having chronic nephritis dies from pneumonia. The acute disease occurring independently of the chronic disease is the chief cause of death, although the fatal event may have been made more sure by the existence of the antecedent disease, and although the antecedent disease would have ultimately caused death.

In attributing death to scrofula, tuberculosis, tumor, cancer and other generic terms, as causes, the organic structure or locality where the disease is developed should always be given, if possible, otherwise such terms are very indefinite.

The objects desired in presenting the preceding nomenclature of causes of death, and the suggestions following, are to subserve the purpose of greater uniformity and precision in the use of nosological terms, and to promote the accomplishment of entire definiteness, accuracy and completeness in the physicians' certificates of causes of death.

The State of Rhode Island has a leading reputation for the completeness of its vital statistics. It is not excelled, if equalled, by any State in the Union. With the exception of two or three, there are no States that have even any approximate completeness of numbers of decedents, and fullness of statements of fact connected therewith. It is hoped that the physicians of Rhode Island will feel a professional and patriotic interest in the continued elevation of the reputation of the State as a collector of accurate and complete vital statistics.

APPENDIX B.

THE LAWS OF RHODE ISLAND

IN RELATION TO THE REGISTRATION OF

BIRTHS, MARRIAGES AND DEATHS,

AND OF DIVORCE.

PUBLIC STATUTES, CHAPTER 85, AND PUBLIC LAWS, CHAPTER 747.

OF THE REGISTRATION OF BIRTHS, DEATHS AND MARRIAGES.

SECTION 1. The town clerks of the several towns, or any person whom the board of aldermen of any city, or the town council of any town may appoint for that purpose, shall obtain, chronologically record and index, as required by the forms prescribed by section three of this chapter, all information concerning births, marriages and deaths occurring among the inhabitants of their respective towns ; and on or before the first Monday in March, annually, shall make duly certified returns thereof to the secretary of the state board of health, for the year ending on the thirty-first day of December next preceding, accompanying the same with a list of the persons required by law to make returns to them, who have neglected to do so, and with such remarks relating to the object of this chapter as they may deem important to communicate.

SEC. 2. The secretary of the state board of health shall receive the returns made in pursuance of the preceding section, and annually make a general abstract and report thereof, in form as prescribed by section three of this chapter, and publish not exceeding one thousand copies thereof, and for preparing, tabulating and publishing said annual report the sum of five hundred dollars shall be paid to the state registrar. Said returns, after such report is prepared, shall be deposited in the office of the secretary of state, who shall cause the same to be arranged, full alphabetical indices of all the names to be made, and the whole to be bound in volumes of convenient size and carefully preserved in his office.

Sec. 3. The blank forms required to carry out the provisions of this chapter shall, on application, be furnished by the secretary of the state board of health to clergymen, physicians, undertakers, town clerks, clerks of meetings of the Society of Friends, and other persons requiring them, substantially as follows: The record of a birth shall state the date and place of birth, name and sex of the child, whether born alive or still-born, the name and surname, color, occupation, residence and birthplace of the parents, and the time of recording, so far as the same can be ascertained. The record of a marriage shall state the date of the marriage, place, name, residence and official station of the person by whom married, names and surnames of the parties, age, color, occupation and residence of each, condition, that is, whether single, widowed or divorced, what marriage, that is, whether first, second, third or other marriage, the occupation, birthplace and name of their parents, and the time of recording, so far as the same can be ascertained. The record of deaths shall state the date of death, name and surname of the deceased, the sex, color and condition, whether single or married, age, occupation, place of death, place of birth, names and birthplace of parents, disease or cause of death, and the time of recording, so far as can be ascertained.

Sec. 4. Every meeting of the Society of Friends, clergyman, and all others authorized to join persons in marriage, shall make a faithful record of every such rite performed by them, in manner and form aforesaid, and return the same for the last preceding month, on or before the second Monday of every month, to the town clerk of the town in which such rite shall have been performed; and no marriage shall be solemnized until the parties shall have signed and delivered to the person about to solemnize it, or to the clerk of a meeting of the Society of Friends, a certificate containing the information required for the record of a marriage, as prescribed by this chapter.

Sec. 5. The town clerk of every town shall annually, in the month of January, collect the information required by this chapter, in relation to all children born in the town during the year ending on the thirty-first day of December next preceding.

Sec. 6. Whenever any person shall die, or any still born child shall be brought forth in this state, the physician attending at such bringing forth or last sickness, if any physician so attended, shall, within forty-eight hours after such death or bringing forth, leave with the family, if any, or person having the care of the deceased, or the person bringing forth such still born child, or give to the undertaker or person who conducts the funeral a certificate stating, in case of a death, the name of the deceased, the date of the death, and the disease or cause of the death, and in case of the bringing forth of a still born child, the date and the cause of such child being brought forth still born. Provided, however, if the physician last in attendance shall not have knowledge of such death, or is otherwise reasonably prevented from leaving with the family or giving the undertaker such certificate within the time hereinbefore specified, or before the funeral or disposal of the remains of the deceased, he shall, within five days after having knowledge of such death by notification or otherwise, send to the town or city clerk or registrar of the town or city in which such death occurred a certificate, stating the name, date and disease or cause of death of such decedent.

Sec. 7. Every town council may appoint a sufficient number of persons to act as undertakers, removable at the pleasure of such council.

Sec. 8. No undertaker or other person shall conduct a funeral, or bury or deposit in a tomb, or remove from this State, or otherwise dispose of the remains of any deceased person or still born child unless he shall first obtain the physician's certificate required by section six of this chapter, if a physician was in attendance upon such person who has deceased, or the person bringing forth such still born child, and shall return the same, together with his own certificate of the information required by section three of this chapter, to the town clerk of the town where such death or bringing forth took place. Provided, however, that in such towns as allow the burial or removal of the bodies of deceased persons without a permit from the town clerk, and the undertaker or other person who has charge of the disposal of the remains of the deceased person is unable to obtain the said physician's certificate, after reasonable attempts therefor before the burial or removal of the said remains, then the said undertaker or other person shall make his return as required by section three of this chapter, including the cause of death and the name of the physician last in attendance upon the deceased, immediately to the town or city clerk or registrar of the town or city in which the death occurred. He shall, also, within two days thereafter, notify the physician last in attendance upon the deceased person of the name and date of death of the same.

Sec. 9. Any town may make ordinances more effectually to attain the objects herein contemplated.

Sec. 10. The town clerks, or persons appointed as aforesaid, shall receive for each record of a death made and returned as required by law, and for each record of a marriage made and returned as required by law, twenty cents, to be paid to them out of their respective town treasuries: *Provided*, that the yearly compensation to be paid out of the town treasury as aforesaid, to any one town clerk or person appointed as aforesaid, who shall perform the duties prescribed by this chapter shall not be less than five dollars. Undertakers and others making returns of death as required by sections six and eight of this chapter, shall receive for each full report of a death made to the town clerk five cents in the cities of Providence and Newport, and ten cents in the other towns of the state.

Sec. 11. Every clergyman, physician, undertaker, town clerk, clerk of any meeting of the Society of Friends, or other person who shall willfully or unreasonably neglect or refuse to perform any of the duties imposed on or required of him by this chapter, shall be fined not exceeding twenty dollars nor less than two dollars for each offence, one-half thereof to the use of the town in which the offence shall occur, and one-half thereof to the use of the person who shall complain of the same.

Sec. 12. Every clergyman, physician, coroner, undertaker, medical examiner, or clerk of any meeting of the Society of Friends, shall cause his name, residence and post office address to be recorded in the town clerk's office of the town where he resides.

SEC. 13. No letters of administration or letters testamentary shall be granted by any court of probate, upon the estate of any person, until the death of such person, or the facts from which the same is presumed, shall be duly certified, as near as may be, to the town clerk, in order that the same may be duly registered according to the provisions of this chapter.

SEC. 14. The town clerks of the several towns, the city clerk of the city of Newport, and the city registrar of the city of Providence, shall have the custody of all records of births, deaths and marriages of their respective towns, whether made under the statutes now in force or any former statute, and a certificate signed by them, certifying that any written or printed statement of any marriage, birth or death is a true copy of the record in their custody, shall be admitted as evidence of such marriage, birth or death.

SEC 15. Births, marriages and deaths of non residents shall be distinguished from those of residents, in the returns, by being arranged separately.

SEC. 16. The secretary of the state board of health may, from time to time, vary the forms of returns, and require such additional information as he may consider necessary to accomplish the object of this chapter.

SEC. 17. The town clerks or other officers appointed under this chapter to collect, record and return the births in the several towns, shall receive fees therefor as follows: For making record and return of these facts as required by law, twenty cents each for the first fifty entries in each calendar year, and ten cents each for each subsequent entry and return; to be paid by the town in which the birth is recorded.

SEC. 18. The town clerks of the several towns, or other persons appointed under this chapter to collect the births in the several towns, shall annually in the month of January collect the facts concerning the births within their respective towns, required by this chapter; and shall, so far as practicable, at the same time collect the census of all persons between the ages of five and fifteen years inclusive, as provided by chapter fifty; and shall receive therefor such compensation as the town council or the board of aldermen of their respective towns or cities shall determine: *Provided*, that the city of Providence shall be exempt from so much of the provisions of this section as relates to the collection of the statistics of births.

SEC. 19. Blanks for the foregoing purposes shall be furnished, on application therefor, on or before the first day of December in the year preceding, by the state board of health for the collection of births, and by the commissioner of public schools for the census aforesaid.

SEC. 20. The person or persons who shall discharge the duties required by section eighteen of this chapter, if other than the town clerk, shall make full return thereof to the town clerk of his or their town, on or before the tenth day of February next following.

Sec. 21. The returns required to be made by clerks of the supreme court, in relation to divorces, to the secretary of the state board of health, or a prepared abstract thereof, shall be published in the annual report on the births, marriages and deaths in the state.

SYNOPSIS OF THE LAW OF MARRIAGE.

[CHAPTER 163, PUBLIC STATUTES.

Sections 1, 2 and 3 show what kindred persons cannot marry, and declare marriages within prohibited degrees null and void.

Section 4 makes an exception in favor of Jews, within the degrees of affinity or consanguinity allowed by their religion.

Section 5 declares the marriage of persons having a husband or wife living, and of idiots and lunatics, absolutely void.

Sec. 6. "Any ordained minister or elder of any religious denomination, who shall be *domiciled* in this state, and either justice of the supreme court, may join persons in marriage in any town in the state. (It will be seen that clergymen from other states *cannot* LAWFULLY *solemnize marriages* in Rhode Island.)

Sec. 8. Wardens in the town of New Shoreham may join persons in marriage in said town.

Section 9 provides that no minister, elder, magistrate or warden shall join persons in marriage, unless such persons, ***if residents of this state,*** shall first present (to the clergyman or other person officiating) a certificate properly executed and signed by the town or city clerk or city registrar of the town or city in which ***EACH of such persons shall RESPECTIVELY reside,*** and ***if not residents of this state,*** then from the town or city clerk or registrar of *the town or city in which the marriage shall be solemnized*, to the effect that the said town or city clerk or registrar has ***duly recorded the intention*** of marriage between the parties named in the certificate, the said certificate also setting forth the names and surnames of the parties, the age, color, occupation, birthplace and residence of each, whether either or both have been before married, and, if before married, whether the marriage intended is the first, second, third or other marriage, and also whether the condition of either or both persons previously married is that of a divorced person, and the names, occupation and birthplace of each of their parents; and no town or city clerk or city registrar shall issue such certificate to any minor person under guardianship, unless the consent in writing of the parent or guardian shall have first been obtained thereto: provided, however, such certificate may be issued to a female over eighteen years of age, who has no parent or guardian living in the United States. (The legal minority of both sexes terminates at the age of twenty one.)

SECTION 10 provides that every Society of Friends and *every person* authorized to join persons in marriage, *shall certify* upon the certificate required in section nine of this chapter *the time when* and *the place where* the marriage shall have been solemnized by him, and SHALL *on or before the second Monday of every month*, return the certificate of every marriage solemnized by him during the last preceding month to the *clerk or registrar* of the TOWN OR CITY *in which such rite shall have been performed.*

SECTION 11 forbids the solemnization of the marriage ceremony, by any person, when lawful objection is made thereto in writing, until such lawful objection be removed.

SECTIONS 12 and 13 provide that any person who shall join persons in marriage without first receiving the certificate required in section nine of this chapter, or otherwise contrary to or in violation of chapter 163 of the Public Statutes, shall be imprisoned not exceeding six months, or fined not exceeding one thousand dollars.

SECTION 14 provides that ALL PERSONS married without duly proceeding as required by chapter 163, shall be fined not exceeding fifty dollars.

SEC. 15. The solemnization of marriage shall be in the presence of two witnesses at least, besides the minister, elder or magistrate officiating.

SECTION 16 relates to marriage among Quakers or Friends, and among Jews, making them valid if in accordance with the forms, rites and ceremonies of the same respectively.

SECTION 17 provides that at least one of the parties to any marriage solemnized according to the manner and form of the Society of Friends, or rites and ceremonies of the Jewish religion shall, before the celebration thereof, sign and deliver to the town or city clerk or city registrar of the town or city in which such marriage is solemnized, the certificate required in section nine.

CHAPTER 167.

OF DIVORCE.

SECTION 1. Divorces from the bond of marriage shall be decreed in case of any marriage originally void or voidable by law, and in case either party is for crime deemed to be or treated as if civilly dead, or, from absence or other circumstances, may be presumed to be naturally dead.

SEC. 2. Divorces shall be decreed for impotency, adultery, extreme cruelty, wilful desertion for five years of either of the parties, or for such desertion for a shorter period of time in the discretion of the court, for continued drunkenness, for neglect or refusal on the part of the husband, being of sufficient ability, to provide necessaries for the subsistence of his wife; and for any other gross misbehavior and wickedness in either of the parties, repugnant to and in violation of the marriage covenant.

SEC. 3. Whenever it shall appear that the absence, adultery, cruelty, desertion or other cause of complaint, as aforesaid, was committed or occasioned by the collusion of the parties, and done and contrived with an intention to procure a divorce, in such case no divorce shall be decreed.

SEC. 4. Whenever a divorce shall be had for the causes of affinity, consanguinity, impotency, idiocy, lunacy or crime of either of the parties, the wife shall have restored to her all her lands, tenements and hereditaments; and a judgment may be passed for a restoration to her of all or such part of the personal estate specifically, or the value thereof, which has come to the husband's hands by virtue of the marriage, as the court from the circumstances of the case shall deem equitable.

SEC. 5. Whenever the divorce shall be occasioned by adultery, or other of the causes aforesaid, done or committed on the part of the wife, the husband shall hold the personal estate not secured to her by law, forever, and her real estate not secured to her by law during his natural life, in case they have had issue born alive of her body during the marriage, otherwise during her natural life only, if he shall survive her.

SEC. 6. The court may, in such case, allow the wife for her subsistence so much of her real and personal estate as they shall deem necessary or proper.

SEC. 7. Whenever a divorce is granted for adultery or crime on the part of the husband, the wife shall be entitled to dower in the same manner as if he were dead, unless the court shall decree alimony, chargeable upon the estate of the husband, instead of such dower.

SEC. 8. Whenever a divorce shall be had for adultery, or for any of the causes aforesaid, done or committed on the part of the husband, the wife shall continue to hold all her property, real and personal, secured to her by law, free from any right in or control over her disposition of the same, either during her life or at her death; and, if there be no issue living, shall be restored to all other her lands, tenements and hereditaments, if any there be.

SEC. 9 In such case the wife shall be also allowed out of the real or personal estate of the husband, or out of both, such alimony as the court shall think reasonable, not exceeding the use of one moiety of his real estate, during the life of the wife, and the property of one-half of his personal estate, having regard to the personal property that came to the husband by the marriage, and his ability.

SEC. 10. If there be issue living at the time of the divorce, the court, with regard to ordering restoration to the wife of such of her lands, tenements or hereditaments, if any, as may not be secured to her by law, and in regard to the amount of alimony to be allowed her out of the property of the husband, may do as they shall judge the circumstances of the case may require.

SEC 11. Divorces from bed, board, and future cohabitation, until the parties be reconciled, may be granted for any of the causes for which by law a divorce from the bond of marriage may be decreed, and for such other causes as may seem to require the same.

SEC. 12. In case of such divorce, the court may assign to the petitioner a separate maintenance out of the estate or property, of the husband or wife, as the case may be, in such manner, and of such amount as they may think necessary or proper.

SEC. 13. Every petition shall be signed by the petitioner, if of sound mind and of legal age to consent to marriage, otherwise upon application to the court, and after notice to the party in whose name the petition shall be filed, the court may allow such petition to be signed by a guardian or next friend.

SEC. 14. All jurisdiction over divorce, alimony, separate maintenance, or the custody, education, and support of the children of persons divorced or petitioning for a divorce, is vested in the supreme court.

SEC. 15. Said court shall have no cognizance of or jurisdiction over any petition for the same or either of the same, unless the petitioner shall, at the time of preferring such petition, be a domiciled inhabitant of this state, and have resided therein for the period of one year, next before the preferring of such petition.

SEC. 16. All such petitions shall be filed, heard and tried in the county in which the petitioner shall reside.

SEC. 17. The said court may, by general rule or otherwise, prescribe the notice to be given, within or without the state, on such petitions, and may issue such process as may be necessary to carry into effect all powers conferred upon them in relation to the same.

SECTIONS 18, 19 and 20 contain provisions in relation to citations to adverse party residing without the state, or in parts unknown.

SEC. 21. Whenever any citation, issued under the provisions of this chapter, shall be served by a disinterested person, such person shall return the same, having made oath thereon of the place where, the time when, and the manner in which he shall have made service of the said citation.

SECTION 22 provides for giving and ensuring proper and sufficient notice to the adverse party.

Sec. 23. The said court is empowered to regulate the custody, and provide for the education, maintenance and support of the children of all persons by them divorced or petitioning for a divorce, and of all persons to whom a separate maintenance may be granted, or who may petition for the same; to make such allowance to the wife, out of the estate of her husband, for the purpose of enabling her to prosecute or defend against any such petition for divorce or separate maintenance, in case she has no property of her own available for such purposes, as they may think reasonable and proper; and to make all necessary orders and decrees concerning the same, and the same at any time to alter, amend and annul for sufficient cause, after notice to the parties interested therein.

Sec. 24. The said court may authorize a married woman to whom a divorce from the bond of marriage is decreed to change her name, with the same rights and liabilities as if her name had not been changed.

Sec. 25. After the filing and during the pendency of any petition under this chapter, the supreme court may, as in equity, make such interlocutory decrees, or grant such temporary injunctions as may be necessary, until a hearing can be had before the court.

CHAPTER 198.

OF DIVORCES.

Section 5. The clerks of the supreme courts in the several counties shall make returns to the secretary of the state board of health, on or before the first day of March in each and every year, for the year ending on the thirty-first day of December preceding, of all the applications for divorce, showing the number, the number granted, and the causes which are given for the application, but without the names of the parties, in accordance with the blanks which shall be furnished them by the secretary of the state board of health.

INDEX.

See also CONTENTS, *page V.*

Accidents.......18, 30, 43, 49, 63, 77
Ages at time of death, diseases and sex.......30, 156
Alcoholism.......19, 31, 45, 54, 77, 176
Apoplexy.......19, 31, 45, 54, 77, 177
Births, colored.......118
  " diagram of.......108
  " illegitimate.......126
  " number of child of mother.......120
  " parentage.......116
  " plural.......2, 4, 6, 8, 121
  " proportion of to population.......105
  " rates in towns.......102
  " season.......114
  " sex and localities.......111, 113
  " still born.......123, 125
  " thirty-nine years.......97
Brain, diseases of.......20, 32, 46, 54, 77, 180
Bronchitis.......20, 32, 46, 58, 182, 77
Cancers.......20, 32, 45, 54, 77, 184
Causes of death, alphabetically arranged.......18, 30
  " " nosologically arranged, thirty-nine years.......50–65
  " " " " in divisions of the State.......42–49
Child birth.......21, 33, 49, 58, 186
Cholera Infantum.......21, 33, 43, 54, 189
Comparative statistics and comments.......171–243
Consumption. Tables.......21, 33
  " phthisis pulmonalis.......45, 54
Croup. Tables.......22, 34, 43, 54, 199
  " diphtheria and scarlet fever by seasons.......188
Deaths, by counties.......16
  " causes.......18–30
  " " of, for each of forty years.......50

Deaths, causes of, alphabetical order, months ... 18
  " " " " " ages ... 30, 154–157
  " " thirteen principal, order, number and proportion ... 169
  " " twenty principal. Diagram ... 245
  " " unknown ... 168
  " classification and percentage. Tables ... 42
  " diagram of ... 164
  " per 1,000 living, by counties ... 150
  " proportion of to population ... 105
  " rates of, in towns ... 12, 102
  " " " counties ... 16, 148
  " thirty-nine years, total for ... 97
  " twenty-three causes for eighteen years ... 50, 162
Decedents, age ... 156–160
  " colored ... 160–162
  " comparison with births ... 151–152
  " occupation and age ... 66–76
  " " " causes of death. Tables ... 77–88
  " parentage ... 155
  " season ... 153–154
  " sex ... 156–160
Diphtheria. Tables ... 22, 34, 44, 54, 202
  " scarlatina and croup, by seasons ... 230
Divorces ... 144–147
  " ratio of to marriages, different States ... 148
  " statute causes ... 143
Dropsy ... 22, 34, 45, 54, 77, 148
  " compared with diseases of kidney and liver ... 220
Fevers, malarial ... 23, 35, 44, 54, 77, 204
  " typhoid, etc ... 23, 35, 44, 54, 77, 204–207
  " " percentage in different States. Table ... 208
Heart, diseases of ... 23, 35, 46, 54, 77, 208–212
Illegitimates ... 126
Influenza ... 24, 36, 44, 54, 77
Insanity ... 24, 36, 45, 54, 77, 213
Intemperance ... 176
Kidney, diseases of ... 24, 36, 47, 58, 77, 215
  " Bright's disease of ... 25, 37, 47
Laryngitis ... 25, 37, 46, 58
Laws in relation to registration of births, marriages and deaths ... 259
  " " " divorce ... 265
  " of marriage ... 263
Liver, diseases of ... 25, 37, 47, 58, 77, 217

Malarial diseases, fevers........204
Marriages, 1892........3, 59, 128
  " ages of persons married. Tables........133–138
  " colored........141
  " nativity of........131
  " of the divorced........139
  " rates in towns........102
  " season........129
  " thirty-nine years........97
  " widowers and widows........139
  " proportion of to population........105, 129
Measles. Table........25, 26, 37, 44, 54, 221
Mother, number of child of........120
Nomenclature of diseases........245–255
Occupations and ages at death........66–76
  " " " for forty years........241
  " " causes of death........77–93
  " " principal causes of death forty-one years........237
Old age. Table........26, 38, 49, 58, 77, 223
Paralysis. Table........26, 27, 38, 45, 54, 177
Peritonitis........26, 38, 47, 58, 77, 225
Physicians' certificates concerning death........256
Pneumonia........27, 39, 46, 58, 77, 225–228
Puerperal fever........44, 54, 188
Results, comparative, eighteen years........235
Rheumatism........27, 39, 45, 54, 77
Scarlatina. Tables........27, 39, 44, 54, 228
  " diphtheria and croup, by seasons........230
Still born children........58, 122
  " thirty-nine years........97
Suicide........27, 28, 39, 62, 77, 231
Whooping cough........29, 41, 44, 54, 233

COLUMBIA UNIVERSITY LIBRARIES

This book is due on the date indicated below, or at the expiration of a definite period after the date of borrowing, as provided by the library rules or by special arrangement with the Librarian in charge.

DATE BORROWED	DATE DUE	DATE BORROWED	DATE DUE
C28(842)M50			